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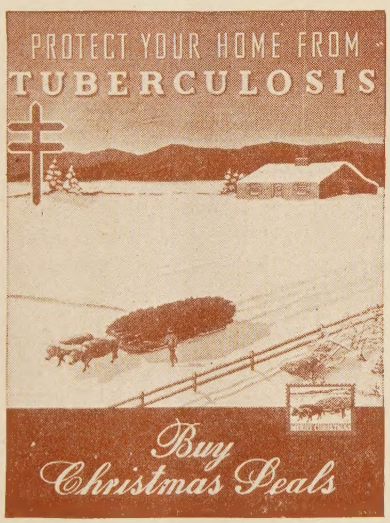

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Vol. 160, No. 12

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DECEMBER, 1947

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New Cancer Bus Introduced by ACS

The Kentucky division of the American Cancer Society, with the aid of the General Electric X-Ray Corporation, has introduced a new weapon making it possible for people in outlying areas, where doctors and x-ray facilities are few, to receive first-class medical examination for cancer without the cost and difficulty of traveling long distances.

This weapon is the first mobile cancer detection bus ever equipped with x-ray apparatus.

Modeled after buses now used for x-ray surveys of apparently-healthy persons in TB campaigns, the cancer bus, known officially as the "Cancer Mobile", will carry x-ray into the byways of Kentucky, acting as an "extension arm" of the state's widespread network of 16 cancer clinics.

The division maintains that Kentucky was the first state to (1) have 100% organization of all counties for fund-raising; (2) create an all-Negro fund-raising organization throughout the state; (3) promote such a large number of cancer detection and treatment clinics; and (4) operate an educational program that reaches down even to grade school children!

Sparking the entire program is Charles E. Tucker, full-time educational director of the division, formerly a preventive epidemiologist with the U. S. Public Health Service.

The bus is of sturdy construction, designed specifically for the complete coverage of the state over roads of all types. It is equipped with fluorescent lighting, ventilating fan, electric heater, shockproof cables, vibration dampers for the x-ray tube, lead-lined partitions to protect personnel against radiation, work benches and water storage tanks.

Kentucky physicians are supporting the unit enthusiastically, and have volunteered their services without charge for the examination of indigents.

The unit was purchased for the Kentucky Division of the American Cancer Society by young women of the Louisville Junior League, who have also offered to go out with the unit in teams to take case histories, and assist in handling patients. Only cost to the cancer society is for the services of the medical director, Dr. Ellis Duncan, and his technician.

To insure the fullest utilization of the bus and other diagnostic facilities, the cancer organization has under way an intensive program of education. This is designed to increase the public's awareness of warning symptoms and to stress the importance of routine periodic medical examinations. In some types of cancer, such as cancer of the stomach, one's condition can become hopeless in a matter of a few months. Early detection is impossible unless people are aware of symptoms and the need for frequent x-ray checkups.

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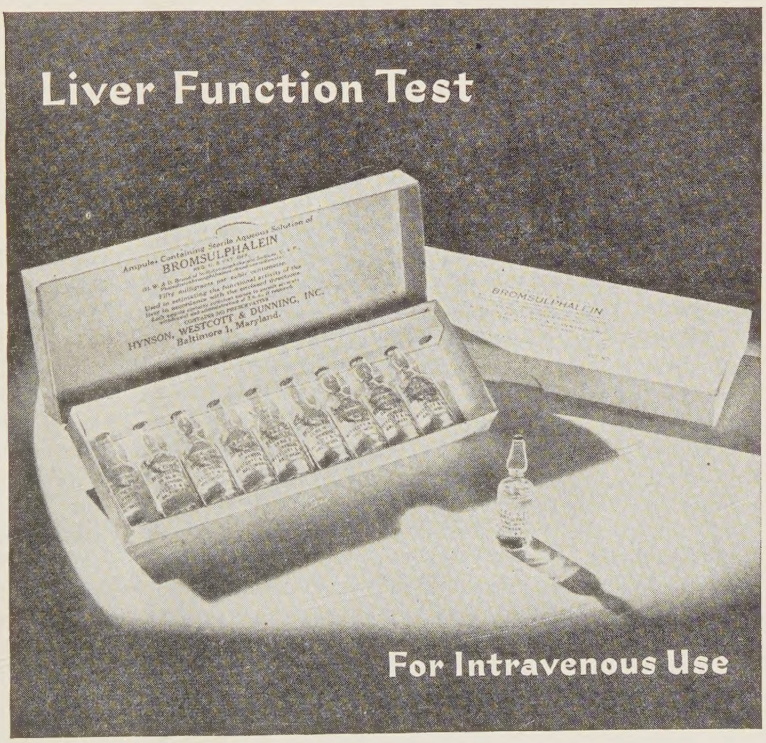

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Open Forum

THE HOSPITAL SURVEY AND CONSTRUCTION PROGRAM

T. SWANN HARDING
Falls Church, Va.

Much has been said about our hospitals and their standards of medical care. At best they are unsurpassed and, as a nation, we have a relatively large number of hospital beds, medical personnel and equipped facilities. Yet authorities agree we do not have all that we need and that much we do have is ill-distributed and poorly located.

Whereas we should have about 4.5 general hospital beds per 1,000 of population, we actually have about 3.5—not counting Federal hospitals which are unavailable to the general public. We should have 5 beds per 1,000 in mental hospitals, and we actually have 3.8. We should have 2.5 beds per annual death from the disease in tuberculosis hospitals and actually have fewer than 1.4 beds per death. We should have 2 beds for chronic disease per 1,000 of population and at least one public health center per 30,000. We have very few of either.

The actual need is even greater than these figures imply. That is because of uneven distribution which gives seven States more than 4.5 general hospital beds per 1,000 of population, while another eight States have only half as many beds. Five States have more than 5 mental hospital beds per 1,000 of population, whereas eleven have fewer than half so many. No single State in the Union actually has as many general, mental, and tuberculosis beds as it needs, while two of them have fewer than half the beds they need in all categories.

Naturally the need is greatest in small towns and rural areas. For hospitals, like medical practitioners, tend to concentrate in well-to-do population centers. The contrast here is striking.

While certain medical politicians proclaim the unsurpassed excellence of our unplanned medical set-up, the truth is that more than 40 percent of all the counties in the United States, with a total population of 15,000,000, have no registered general hospital at all. Naturally not all these counties require hospitals of their own, but many of them do, and few of them are adequately served by neighboring facilities. Areas which are 75 percent urban average 4.6 general hospital beds per 1,000 of population while isolated areas which are 85 percent rural average only 0.83.

Furthermore hospital facilities wear out as do those of other institutions. Many that we have are obsolete, physically unsafe, or so dilapidated as to render proper sanitation impossible. Many which were designed years ago are entirely unfitted to the needs of modern hospital care while others are mere makeshifts, located in buildings which in the first place were never designed for hospital use. Probably not more than 1 hospital in 4, of all categories, is completely acceptable by today's standards.

The most authoritative estimates so far made indicate that we need 250,000 additional general hospital beds; 80,000 additional beds for tuberculosis hospitals; 300,000 additional for mental disease; 260,000 additional for chronics, and about 4,500 public health centers.

All in all that means almost a million additional hospital beds. Existing beds in general and mental hospitals meet about 57 percent of our needs; those in hospitals for tuberculosis, about half. We have only a very small fraction of the beds for chronics and the medical centers we need.

In spite of these facts you will find complacent people who insist that we are doing all right in our present hospitalization system. But they must live in cities, for the physicians, taught as they are to practice in connection with hospitals, naturally settle where hospitals are, if at all possible, when they enter practice for themselves. They strongly eschew rural life and the number of physicians per 1,000 population constantly dwindles in rural areas.

Just before the war our highly populated urban areas had not only 4.6 hospital beds per 1,000 but also 166 physicians per 100,000 of population. The isolated areas, which had little more than 0.8 of a bed per 1,000 of population, also had only 74 physicians per 100,000. The thousand most rural and isolated counties in the country had only 59 physicians per 100,000 people and, in 1943, at least 81 counties hadn't any physician. Some 161 other counties averaged only 20 doctors per 100,000 people.

Some entire States have only about one-third as many doctors in proportion to population as do other more fortunate ones. The same is true of nurses and dentists. Before the war there were about 1,400 persons per dentist in cities as compared with 4,200 in rural areas, while Massachusetts had 403 nurses per 100,000 population and Mississippi had only 62. Rural people generally get less medical service than do urban people, but not because they need less. It is unavailable, or intolerably expensive because it is so far away.

Physical defects are common among rural people who had more turn-downs than city people by far when it came to examination for the Selective Service during the war. The average city person receives about 30 percent more medical care than the average small-town or rural person, while rural people also get less surgery to correct chronic conditions. Rural people average about 505 days of hospital care per 1,000 per year as compared with 858 days per 1,000 of population in cities.

The result of this situation is premature disablement and death, financial loss and family disaster. Statistics sound cold and somewhat unconvincing because so speciously objective. The human facts behind them are much more impressive. Only about two-thirds as many rural as city babies are hospital-born. Maternal and infant mortality are both higher in small towns and rural areas than in cities. The five States with the lowest percentage of births in hospitals (under 42 percent) have maternal mortality rates averaging more than twice as high as

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the five States with more than 95 percent of births in hospitals. Their infant mortality rates are 40 percent higher.

The situation has deteriorated in recent years. During the depression fund shortages prevented the establishment of a normal number of new hospitals as well as the remodeling of older institutions, but our population continued to increase. The shortage of rural physicians has also grown and many of those remaining in the country are often superannuated elderly men. Less able to take care of patients and less well versed in medicine than their modern colleagues who are younger, they heroically do their best, but that is insufficient. While 40 percent of our population is in rural areas only 12 percent of our young Army and Navy doctors preferred to enter rural practice after war service.

The demand increases. Modern medicine depends more and more upon modern hospital techniques and facilities. Wartime experience permeated the knowledge of what modern medicine has to offer hospitalized patients. The economic effects of illness on individuals and communities are better recognized now than ever before.

What threw us into this mess? Lack of planning.

Planning is a poor word. Its connotation has received much ill-repute in a country where industry became great through planning. Research itself must be planned or else it leads nowhere. But our medical system, hospitals and all, simply multiplied like Topsy. It spread out eccentrically and haphazardly in all directions, like the communities built in the suburbs by separate real estate operators, instead of being like the planned communities government and private enterprise "blueprint" to promote pleasant and efficient living.

Hospitals were established wherever government, religious sects, civic groups, or private individuals could be found to sustain them. There was little consideration of relative needs. Facilities were duplicated in some regions, completely lacking in others. Efficiency through coordination of services was neglected, hence small hospitals did not always receive the diagnostic and consultative services they should have received from larger ones and too seldom referred patients. Hospitals were rarely planned scientifically on a basis of thorough-going study of community needs. Finally, the smaller communities simply could not put up the funds to erect big hospitals.

So, in 1943, the American Hospital Association resolved that Federal aid was needed for hospital construction. Finally, in August 1946, the Hospital Survey and Construction Act became law. It was supported by organized medicine and dentistry as well as by the hospital associations. The act authorized the government to pay one-third of the cost of a survey and planning program for each state and territory. This involved the making of a detailed inventory of existing facilities and careful determination of the needs of each area in order to provide planned services for all population groups—including those unable to pay.

After State plans are developed and approved the Federal Government is authorized to pay one-third the cost of constructing facilities included in the plan, priority being given the areas where need is greatest simply because there are still insufficient

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Purger of earth, and medicine of men...
Washing out harms and grief from memory..."
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funds to fill all requirements. The facilities must meet minimum standards and the States must adopt licensure legislation to govern their operation. The sponsor must demonstrate that sufficient funds will be available for operation and maintenance. To be sponsored the hospital must be a nonprofit institution if private. They may be sponsored by State, Territorial, or local governments.

The Act authorizes appropriations of $75,000,000 a year for five years. If all this money is appropriated and if every dollar is matched by two dollars of non-Federal funds as legally required, the total amount available will be $1,125,000,000 which, of course, is insufficient to do the job. Even at pre-war construction costs it would not do more than a quarter of the job; now, with inflation on and labor high, it will be more like one-sixth. Furthermore, many lower-income States will be unable to match the Federal funds on a two-dollar-for-one basis, hence cannot take advantage of the plan. So many areas with urgent needs will be unable to provide their share of the costs.

The funds will be insufficient to build a major part of the facilities needed. Shortages of equipment, building materials, and medical personnel will make the job harder. But, even though the goal cannot be reached for many years, the objectives are now clearly defined and a decisive step has been taken towards providing adequate hospital facilities to serve all, regardless of race, color, creed, economic condition, or geographical location.

Each community will not share equally in the plan, for that will depend on its needs and its ability to match the available Federal funds. It is desirable that general hospitals range in size from 50 to 700 beds because those smaller cannot usually afford the types of service needed and those larger become too impersonal from the patients' standpoint. New wings or other additions can be planned for existing hospitals.

It used to be estimated that the total cost of constructing and equipping a hospital would run $8,000 per bed, though the range ran up to $12,000 and probably $15,000 is not outlandish at all at today's inflated prices. The annual operating budget of a hospital is usually estimated at about one-third the total cost of constructing and equipping it. In general it takes 1½ persons per patient per day to operate a hospital—doctors, nurses, technicians, orderlies, cooks, dietitians and all other personnel included.

Up to July 1, 1947, 47 States, the District of Columbia, Alaska, Hawaii, and Puerto Rico had appointed State agencies to make their hospital surveys. Many States had completed their surveys and had begun work on their plans. The official State agency is the best source of information for physicians and others who wish to know more about it, or they can contact the local health department. A *Study Guide for Hospital Planning* has been prepared and may be procured from the State agency. The Division of Hospital Facilities, Public Health Service, Federal Security Agency, Washington, D. C., can also supply some pamphlets and information.

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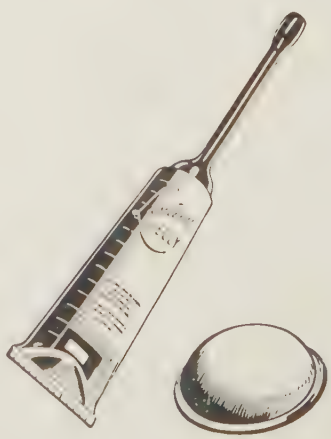

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Yale Compiles News on Human Pressure Reactions

Through the use of a small decompression chamber, which has taken laboratory animals up to simulated altitudes as high as 80,000 feet, Yale School of Medicine physiologists have compiled information on reactions of living organisms to pressure changes at great heights.

Dr. John F. Fulton, chairman of the Yale Department of Physiology, reports that the findings, when completed, may have a bearing on the heights to which airplanes equipped with pressurized cabins can safely fly.

After decompression at extremely high altitudes, the anoxia is sudden and complete in the lungs. How this affects living organisms and how long breathing and consciousness will last, are questions awaiting answers which are being sought after through this current research.

In experiments with rats it was found that explosive decompression itself does not kill the animals, even at heights of 75,000 feet. If a rat is promptly recompressed, its breathing recovers after approximately 18 seconds, and the heart beat is resumed. If the rat is not brought down to tolerable altitudes soon enough, it will die.

Yale research has also shown that an explosively-decompressed rat stops breathing after 18 seconds at all altitudes above the 52,000-foot level. This is true because at this height, barometric pressure becomes equal to vapor and carbon dioxide pressure in the lungs of all mammals. Hence, no oxygen is available to the lungs.

In a fall through oxygen, the decompressed rat's chances of survival are better. "Even when descending from 75,000 feet, at a free-fall rate, a rat has a 50 percent chance of surviving," the Yale research group said. For humans, an oxygen mask therefore "might become a significant factor in chances for survival, but not until the person had descended to about the 40,000-foot level."

The aeromedical unit, which has operated pressure chambers since 1940, is continuing its experiments with monkeys, to obtain data more directly applicable to humans. All aeromedical research at Yale from November, 1941, until the end of 1945 was carried out with military secrecy under contract with the Office of Scientific Research and Development. Since 1946, unit studies have been supported by grants from the Army and Navy.

Besides the animal chamber, the unit has a larger experimental chamber, for human beings, which was installed in 1942. Pressure changes from sea level to 40,000 feet can be attained in four minutes in this chamber, which can also change temperatures from 70 degrees above to 70 degrees below zero Fahrenheit in the same time interval.

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Colorado Receives Large Cancer Grants

The University of Colorado School of Medicine has received $10,000 for cancer research by the National Cancer Institute of the U. S. Public Health Service. Other grants totaling $6,618.20 have been made for research to be done by various members of the faculty.

Also in Denver there was the opening, this fall, of its School of Physical Therapy. The medical director is Dr. Harold Dinken, associate professor and director of the department of physical medicine and rehabilitation of the Medical School and Hospitals of the University of Colorado Medical Center.

New Psychiatric Society in Formative Stages

The American Association of Clinical Psychopathologists is the proposed name for the new society now being formed for qualified members in the field of the private practice of psychiatry.

The society's meeting will be comparable to the old time "salon" gatherings where eminent doctors will pool experiences, findings, views and thoughts regarding the treatment of patients in the community. Therefore, individuals who are in need of psychiatric help will have qualified physicians available to treat them along common sense, brief if necessary, and sometimes superficial methods and techniques. This innovation will overcome the shortage of known qualified men in the field.

The Association's meeting schedule is once or twice a year at the time of the meeting of the American Psychiatric Association and again at the time of the meeting of the Association For Research on Nervous and Mental Diseases in New York.

Membership qualifications are as follows: medical doctor, member of county or state society, member of the AMA, Fellow of the American Psychiatric Association, must be in private practice, should not be limited to any one form of therapy, must not be on full time mural basis.

The membership is limited to one hundred qualified individuals.

* * *

Breisky's disease is Kraurosis vulvae, and was described by August Breisky in 1875, the year that Neisser discovered the gonococcus. Breisky, (1832-1889) was a gynecologist. Weir and Tait had recorded cases of Kraurosis vulvae prior to Breisky but they did not appreciate the nature of the disease.

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20th Season of International Spanish Speaking Association Honored

His excellency, the ambassador of Uruguay, guest of honor at the chapter magnum meeting of the International Spanish Speaking Association of Physicians, which inaugurated its 20th season of scientific sessions last month at the Waldorf Astoria hotel, presented Dr. J. M. Gershberg, president of the association, with a photograph and official letter from the president of his country informing of his acceptance as honorary president.

The scheduled lectures, which were limited to 15 minutes contained messages for the psychiatrist, gynocologist, ophtholmologist, urologist, cardiologist, proctologist, endocrinologist, and eugenicist. At this scientific session, entitled, "Symposium on Geriatrics," Dr. E. B. Allen, M. D., president American Geriatric Society, spoke on "Psychosis and the Fear of Death in Aging."

Issue Requirements Change for Orthopedic Footwear

New regulations governing the requisitioning and supply of orthopedic footwear to Army personnel on active duty who have foot injuries, deformities or disabilities requiring the wearing of such footwear, and the supply of such footwear through the Veterans Administration to eligible veterans of all the U. S. armed forces recently have been issued by the Quartermaster Corps, Department of the Army.

The Department of the Army and Veterans Administration have entered into an agreement under which the Veterans Administration will operate several cast-making units formerly operated by the Army. Such units will be available for processing both Army personnel and eligible veterans. All will be under technical control of the Quartermaster General.

The Medical Department will determine requirements and provide funds for supplying orthopedic footwear to Army personnel and the Veterans Administration will perform the same functions for eligible veterans.

Army personnel will be issued orthopedic shoes upon granting of a medical certificate of necessity. Veterans of the armed services eligible for orthopedic shoes because of service-connected disabilities or injuries of the feet should file application with the manager of the Veterans Administration regional office or center having jurisdiction over the geographical area in which they are located.

* * *

Heinrich Iraneous *Quincke,* a German, described the disease which bears his name as Angioneur tic edema in 1882. The disease was independently described by Bannister.

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Public Health Service Awards Announced

In a public report by Oscar R. Ewing, federal security administrator, it was revealed that Public Health Service awards for basic medical research have totaled $10,214,174 during the past 20 months.

The highest sum granted was in the research of penicillin in treatment of syphilis. The second highest sum was in the field of cancer, and the third dealt with heart disease and other cardiovascular illness.

This project which was launched in late 1945, is planned and directed by 250 of the nation's top civilian scientists for the purpose of producing the research which they consider most essential to the improvement of the nation's health.

Louisiana Expands Sanitary Services

Louisiana's State Department of Health has extended its sanitation services in the division of local health services. Its object is to promote better organization and coordination of sanitary activities throughout the state. At present the section will emphasize and expand its activities in restaurant, restroom and hotel sanitation; typhus control; excreta disposal systems; sewer connections, and rabies control.

Professor White Reports New Findings on the Control of Body Tissue

Associate Professor Abraham White. Yale scientist, has reported new discoveries about the control of body tissue by tiny glands. It is consequently reported that these findings may pave the way for expanded medical use of vacinnes, control of allergies and resistance to infectious diseases.

"For the first time," Professor White said, "Investigators in the Yale School of Medicine have been able to answer the question as to how hormones of the adrenal cortex control the amount of antibodies in lymphocyte cells."

His announcement culminates four years of research in the physiological chemistry laboratories and was made to the Harvey Society at a recent meeting in the New York Academy of Medicine.

Dr. White's research revealed that a three step process takes place in the body to combat infection. This process initiates with adrenotrophin, which affects the production of adrenal cortex hormones, and these in turn influence the function of the lymphocyte. If there is a break in this three-link chain at any stage, then the body may become deficient in resisting disease.

Research on the function of the adrenal cortex and the lymphocytes and their relationship in antibody production was done in cooperation with Dr. T. F. Dougherty, and Dr. Jeanne H. Chase.

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Critique

It's not new: When Sir Marc Armand Ruffer studied Egyptian mummies in Nubia he discovered that many of these ancients suffered from arteriosclerosis despite the fact that they did not smoke, drink hard liquor, live a hurried life, eat too much meat, suffer from overexercise, overwork, or syphilis. Moreover they had pyorrhea in abundance. Women as well as men became bald, and consanguineous marriages apparently did not effect racial deterioration. In ancient Greece the priest of Aesculapius went to the chambers of sleeping patients and whispered health suggestions into their ears. The next day the patient was told to report his dreams and these were analyzed. Ancient Arabian physicians were advised by one of the greatest to try the effects of medicine on themselves before trying it on their patients. It's not new!

Boredom: Modern specialization in industry produces considerable boredom and fatigue in workers. Few operatives on repetitive processes fail to become bored from time to time. This causes a reduced work rate particularly noticeable towards the middle of a work period, followed by a steadier and improved rate of working as the end of the work period is reached. The degree of boredom bears some relation to the mechanization of the process. If the mind is not distracted, boredom can become very intense and operatives begin to dwell on unpleasant situations, or even on their own real or fancied symptoms. Worst are semiautomatic processes which require sufficient attention to prevent mind-wandering but insufficient for complete absorption of mental activity. Adaptation finally occurs so that work which is initially tedious and unpleasant may become first tolerable, then enjoyable.

Point of ethics: A druggist, asked what he did when a doctor made a mistake in a prescription asked, in turn, what do you do when the doctor makes a mistake and blames it on you? What do you do when he writes for 2 ounces of sodium sulfate and, intending to signify 1½ teaspoonfuls, writes ½ teaspoonful in water each morning, you so dispense it, and he tells the patient you made a mistake? What do you do when he writes an aqueous mixture containing Ac. Acetylsalicylic, intending to prescribe Syr. Ac. Citricum, and tells the patient it should be a clear solution if properly compounded? What would you do when chalk, bismuth subcarbonate and magnesium oxide, are prescribed and the addition of water is forgotten. You not being psychic dispense it as a powder, and he tells the patient that if you had any sense you would have sent the prescription out in liquid form?

Sex and infant mortality Dr. Harry Bakwin (*Human Biology* 1: 1: 1929) said that, in the registration survey of the U. S. 1915-24, male mortality far exceeded female. Under 1 year there were 100 female deaths to 130-34 male. The difference is marked immediately after birth but decreases at year 4 to sexual equality in death rate. Females had benefitted much more than males from the fall in infant mortality which began about 1900.

The pharmacist Back in the good old days the pharmacist of Germany and Austria was a true scientist with a bachelor's degree. His profession was a serious one and he approached it with gravity. The drug store did not sell perfumery, flypaper, toothbrushes, dental creams, cosmetics, electric toasters, sandwiches and drinks, not to mention proprietary remedies, gargles, mouthwashes, and so on. The pharmacist alone could compound prescriptions and dispense poisons. Proprietaries had to give their exact analyses to a central office with samples to back it up before they could be sold to the public. Medical fakes were strictly controlled by law in Vienna; careless producers drew high penalties.

Therapeutic myths For centuries valerian and asafoetida were administered as specifics for hysteria because the uterus was supposed to be wandering loose about the body and these scared it back in place. In modern times sugar-coated zinc salt of valerianic acid was still administered and the ancients were complimented on their perspicacity. This was considered a valuable line of treatment and is not yet quite out of fashion. (Cf., Ernest Jones M. D., on Rationalization in Every Day Life, pages 105-6 of the *Outline of Psychoanalysis*. In the same see also pages 146-52 for Dr. Smith Ely Jelliffe's account of a woman who showed high blood pressure, albumin, edema, dyspnea, constipation, retention, etc., etc., and was given six months to live by physicians, after clinical examination—provided she went on a very strict diet—but who was cured by psychoanalysis.)

Banana The use of bananas for infant feeding was introduced by Pease and Rose (*Amer. Jour. Dis. Child.* 14: 379: 1917) after Myers and Rose had used the fruit for adults. It was tried successfully on children two years of age and soon became routine. Von Meysenbug (*New Orleans Med. and Surg. Jour.* 80: 180: 1927) showed that the fruit must be properly ripened so that assimilable carbohydrates would be at a maximum. Full of vitamins the banana can well replace much sugar, potato, and cereal.

Ailments and emotions There is a big difference between the patient's complaint and his motive in coming to the doctor. The mental and emotional problems behind indigestion, back pain, or loss of appetite will often tell more than laboratory and clinical examinations. Fear of disease ranks high among these factors, fear of cancer especially. Worry about one's condition, unstable personality, sex maladjustment, death of a member of the family, all count. Mental and emotional difficulties are ignored at the physician's peril when he examines the patient. As long ago as 1929, Dr. Arthur S. Granger attributed even high blood pressure mainly to nerves; he gave drugs only a very small place in its treatment, but advised avoidance of tension, the high pressure life, and strenuous exercise, by nervous and sensitive people. Those with hypertension must in the main avoid worries in business and annoyances at home.

Banned *The New York Times* of June 20, 1929 was reporting that the current issue of *Scribner's Magazine* had been banned from prophylactic Boston's newsstands because the superintendent of police found the chapter of a serial therein highly objectionable. The material in question was part of Hemingway's *Farewell to Arms.*

One to chew on "The assertion that the natural universe is actually infinite in extent is contradictory in itself . . . In any extension we can conceive a part to be subtracted, annihilated, or removed from consideration. Now the remainder is either finite or infinite. If finite, then that finite remainder plus the finite part removed equaled infinity; which is a contradiction. If the remainder be infinite, then the void left by the part subtracted constitutes a limit to the infinite remainder, and by restoring that part we add to the actually infinite; all of which is contradictory." Anyway it stumps us. Consult Prof. J. A. McWilliams' *Cosmology: A Text for Colleges.*

Said Nietsche Speaking of Ascetic Ideals in the *Genealogy of Morals,* "The fact, therefore, that anyone feels 'guilty,' 'sinful,' is certainly not yet any proof that he is right in feeling so, any more than one is healthy because one feels healthy. Remember the celebrated witch ordeals: in those days the most acute and humane judges had no doubt but that in these cases they were confronted with guilt—the 'witches' themselves had no doubt on the point—and yet guilt was lacking."

The Critic

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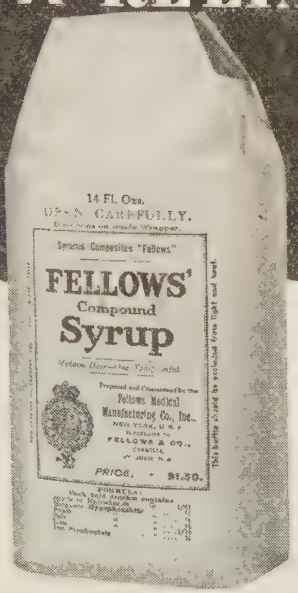

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National Human Reproduction Program Announced

The long neglected field of human reproduction finally was catered to at the recent meeting of the reorganized board of directors of the National Committee on Maternal Health at the New York University Club.

This research program, under the direction of the National Research Council in Washington, has already established a committee on human reproduction to study needs and then to recommend grants for specific research projects to qualified institutions and individuals.

Dr. Haven Emerson, chairman of the National Committee on Maternal Health, explained that the panels set up by the council will operate in accordance with policies to be established by his newly reorganized committee board.

Dr. Howard C. Taylor, Jr., professor of obstetrics and gynecology, Columbia University's College of Physicians and Surgeons, heads the National Research Council's new committee on Human Reproduction.

"Today, $30,000,000 is being spent in this country every year for research on animal and plant breeding." Dr. Taylor said, "Virtually nothing is currently expended on any coordinated research program in the far more important field of human reproduction.

"The Committee on Human Reproduction, therefore, envisages its work as covering more than the purely medical aspects of reproduction. These are so closely bound up with the socio-economic environmental problems of individual, family, community, nation and the whole world that a sound research program can ignore none of them."

This proposed study centers on the following:

(1) the physiology of and the factors controlling conception; (2) the causes of sterility and treatment for infertility; (3) maternal and fetal physiology and clinical disorders developing during pregnancy; (4) the psychological problems of marriage and the family relationship; (5) the population aspects of these problems, social and economic as well as medical.

It was emphasized at the meeting that this research program could be strengthened in its importance if the fact was exposed that we have a high stillbirth rate of 23.9 per 1,000 babies born alive.

The above is clear evidence that little is known about the problems of infertility, of population, of conception control, and the factors which influence development of the fetus.

Dr. Emerson explained that the National Committee on Maternal Health will work in cooperation with the council's already existing committees on endocrinology and sex research.

"The planned Parenthood Federation will seek to contribute a substantial part of the funds for the research program. The clinics and records of its affiliates will also constitute a valuable field for certain of the research projects.

"While not a party to the contract between the National Research Council and the National Committee on Maternal Health, the Federation is collaborating as a full partner in the whole program."

NYU Launches Low Cost Medical Care

A year-round medical care program for wage earner groups has been launched by the New York University Medical Group, which is a new group practice medical unit organized by the institution's medical faculty.

It was reported at the meeting, which consisted of an audience made up of representatives of nearby East Side housing developments, the Secretariat of the United Nations, city officials, and representatives of the medical profession, that the medical group will eventually serve a potential 20,000 to 40,000 wage earners.

This service will be on a low cost basis similar to the way that the Blue Cross Plan provides wage earners with hospital care on a budget basis.

Sir Raphael Cilento, U. N. Secretariat, known for his work in public health in Australia, was one of the guest speakers.

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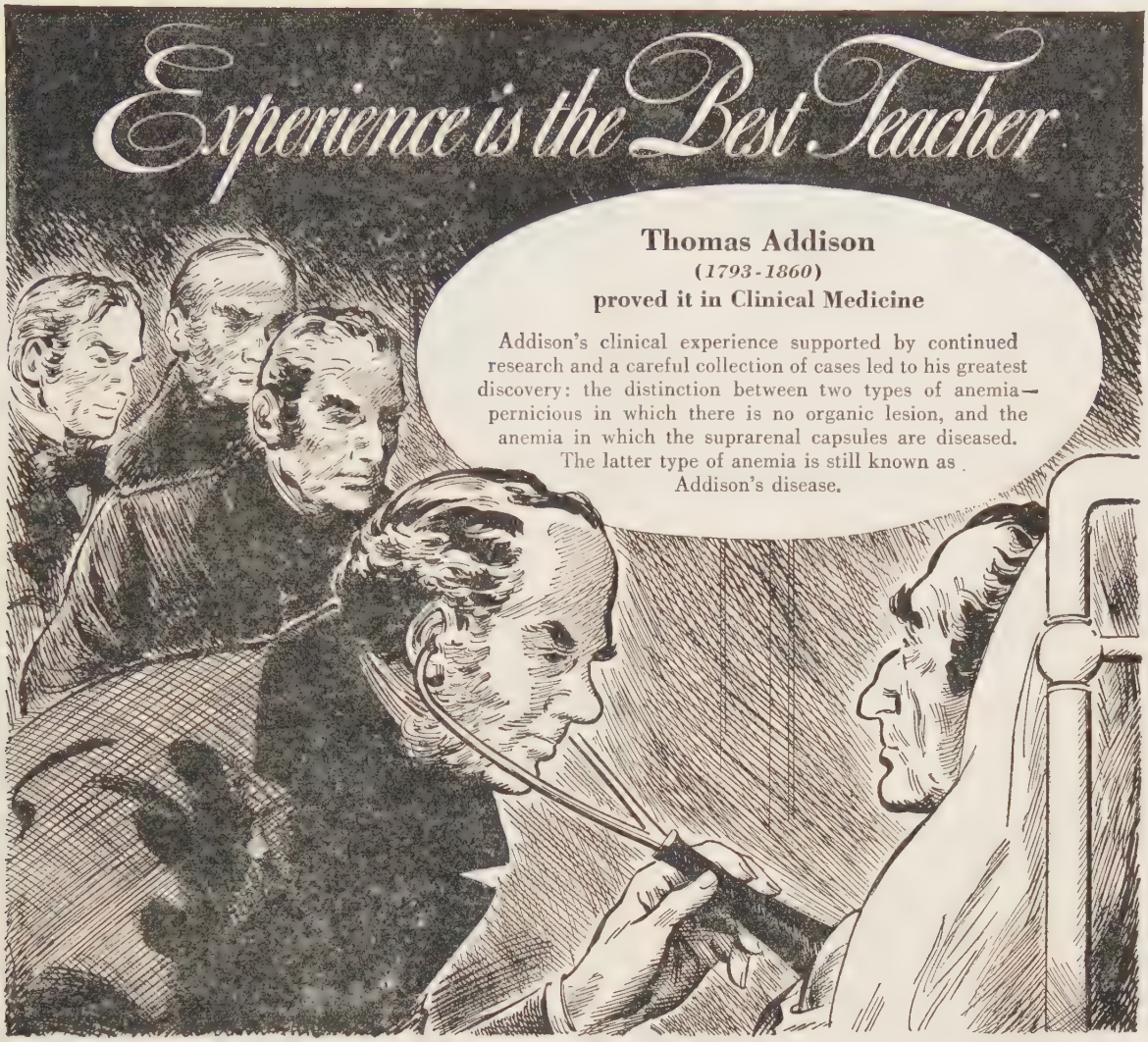

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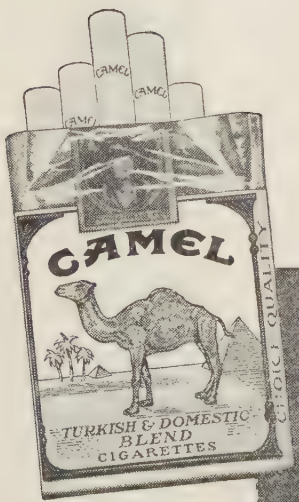

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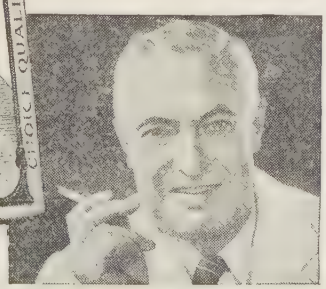

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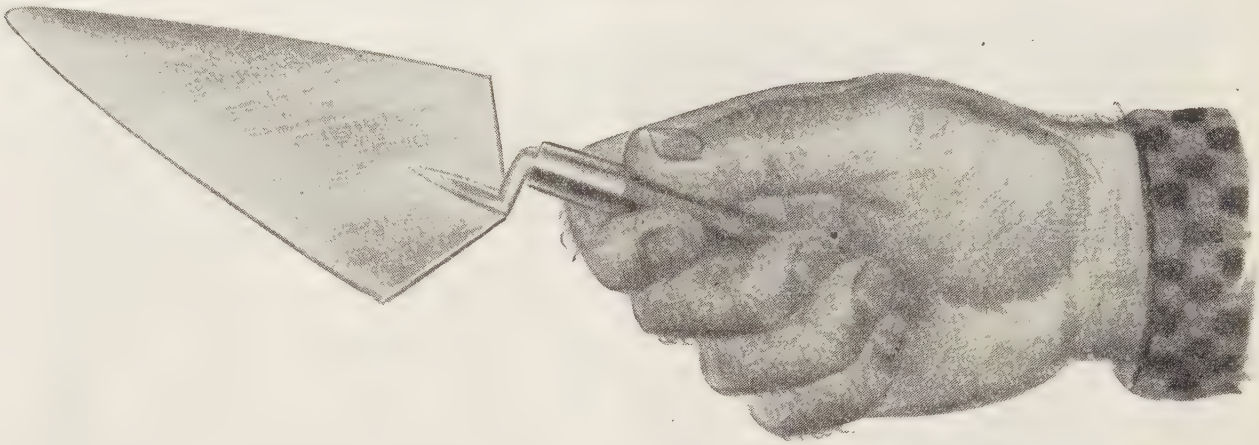

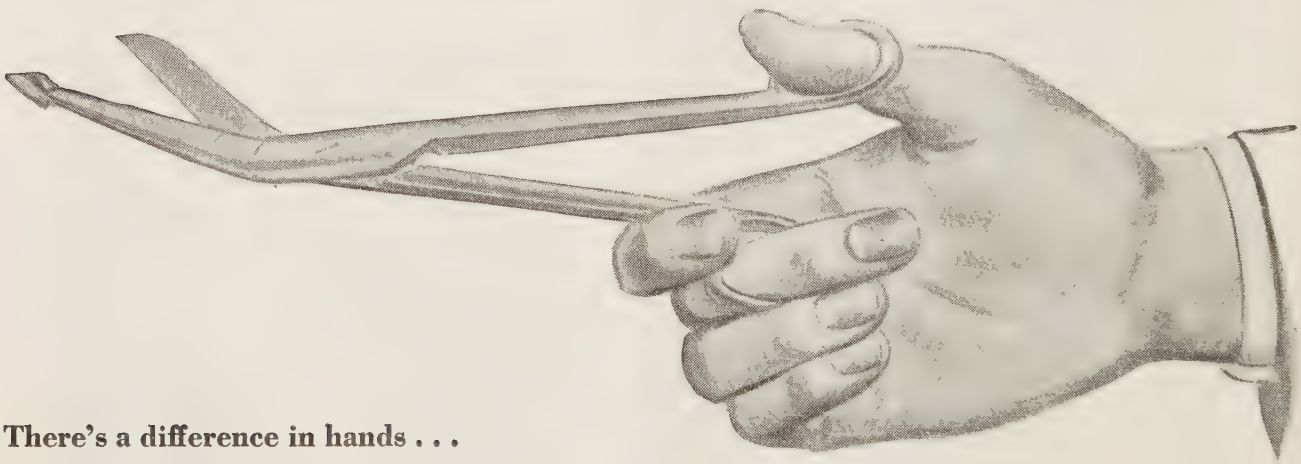

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THE ENDOCRINE PATHOGENESIS AND TREATMENT OF ACNE VULGARIS*

MAX A. GOLDZIEHER, M. D.

New York City

Acne vulgaris is a skin disease based on changes of the sebaceous gland which facilitates infection by pyogenic microorganisms and subsequent inflammatory reactions. While the care of the latter pertains clearly to the domain of the dermatologist, the pathogenesis of the disease transcends the limits of his specialty, in view of the significance of the responsible systemic factors.

The role of such systemic factors is generally recognized but the opinions are widely divergent as to their nature. Disturbances of gastrointestinal function, an allergic state, faulty nutrition and lack of vitamins have been mentioned and the causative role of these factors supported by a variety of observations. It would seem, however, that prevalent evidence is in favor of endocrine influences as the cause of alteration of the sebaceous glands and their ducts.

The evidence in favor of the endocrine pathogenesis of acne can be summarized as follows:

1. Acne is a common condition of the adolescent male which exists in at least 67 percent of the boys between the age of 15 and 18. (1) Only a small minority of boys goes to full maturity without at least a temporary eruption of acne. After the male attains full maturity, acne as a rule, subsides with the exception of the hypogonad, eunuchoid, individual whose eruptions often persist far into adult life.

2. In the female, acne is commonly associated with *disturbances of menstruation.* These disturbances are of varied type and include irregular, prolonged cycles, menorrhagia with or without abbreviated cycles, and dysmenorrhea. The skin lesions may exist throughout the month, yet in most cases, they develop during the lutein phase of the cycle or become considerably aggravated premenstrually. They usually subside with the onset of the period.

3. Pregnancy has a conspicuous effect upon acne. The lesions either subside entirely during the period of gestation or, in exceptional cases, may become greatly aggravated.

4. Contrary to the behavior in the male, acne does not subside in the female at the time full maturity is attained but persists often throughout the childbearing age. It is not met with, however, during and after menopause.

5. Acne eruptions are part of the adrenogenital syndrome in both sexes, in childhood as well as in the adult. In case this disease is caused by a neoplasm of the adrenal cortex, surgical removal of the tumor remedies the acne as well as the other symptoms of masculinization. (2)

6. Hormone assays of the urine in individuals affected with acne have shown a moderate increase in urinary androgen excretion in both sexes. As the urinary estrogens are decreased, the androgen-estrogen ratio is increased up to 100 percent. (3, 4)

7. Treatment with testosterone both in male and female patients is likely to bring on acne. (5) This is especially conspicuous in the hypogonad male. (6)

The conclusions drawn from these observations seem to point to androgenic substances as responsible for changes of the sebaceous apparatus. That this conclusion is justified was clearly demonstrated by recent experimental work which showed that remarkable hyperplasia of the sebaceous glands can be achieved in animals as well as in man by administration of testosterone whereas treatment with estrogen induces marked atrophy. (7)

The response of the human skin to androgenic material obviously does not depend exclusively on the amount of androgen secreted or on its concentration in the body fluids, for if this were the sole determining factor, acne would have to be prevalent in the adult male and most conspicuous in the more virile types. This, nevertheless, is contrary to the facts. One must postulate, therefore, that the human skin and its sebaceous glands are not always equally

* From the Endocrine Clinic, St. Clare's Hospital, New York City.

sensitive to androgenic stimulation. Thus, the skin of the female is more sensitive to androgen than that of the male and the skin of young boys, not fully accustomed to the influence of androgens, reveals greater sensitivity which, however, subsides with maturity. This makes acne a self limiting disease in the male, with the exception of the eunuchoid whose skin remains permanently sensitive to the effect of androgens.

In order to define properly the term, androgens, all steroid substances produced in the body must be included which are capable of androgenic effects assayable on the capon's comb or on the castrated rat's seminal vesicle. In addition to testosterone, several other androgenic substances are known which are structurally more or less closely related to the testicular hormone. Even progesterone, the hormone of the lutein body, is slightly androgenic. (8)

The adrenal cortex normally produces steroids with slight androgenic properties but under pathologic circumstances, it may secrete large amounts of abnormal, strongly androgenic substances. It must be borne in mind that metabolites may be formed from the various steroids which are biologically active and effective as androgens. (9)

The source of androgenic steroids in the male which are capable of stimulating the sebaceous glands needs no further elaboration. It is different in the female, although it is a well established fact that androgenic substances are physiologically produced and constantly present in the sexually mature female. Their main source is still not definitely determined, although some of the androgens excreted in the urine as 17-ketosteroids are clearly derived from the adrenal cortex.

Some of the steroids seem to come from the ovary and evidence points towards the lutein body and luteinized theca or stroma cells as their most likely source of origin. (10) As a matter of fact, symptoms of masculinization such as facial hypertrichosis have been observed in cases in which the ovary was the site of extensive or pathological luteinization.

Hypertrichosis may develop in pregnancy and subside after childbirth, or it may be associated with enlargement of the ovaries due to lutein body cysts or extensive theca luteinization. Virilism is associated with ovarian tumors which contain lutein tissue. Thus, there is good evidence to believe that *luteinized* ovarian cells are potential sources of androgens.

It is reasonable to assume that a functionally deficient lutein body such as occurs in women with abnormal menstrual cycles or menorrhagia, secretes structurally related, but more androgenic steroids instead of the physiologic hormone. Such a derivative, 17 (B)-hydroxyprogesterone, is highly androgenic. (11) The conversion of sterols of the progesterone type into androsterone also has been observed. (12)

Emphasis on the pathogenetic role of androgens is no negation of the fact that nutritional and metabolic factors or deficiency of fat soluble vitamins, especially vitamin A, play a contributory role in the development of acne. The primary significance of the endocrine factor must be maintained in spite of the confusing aspects of endocrine therapy which has been tried for the cure of acne in varied form and with variable success.

A review of the literature confronts us with claims of therapeutic achievements with the help of diverse hormonal products such as thyroid (13), estrogen (14, 15, 16, 17), gonadotropins (18, 19) and prolactin. (20) Basically, these substances were employed for the correction of the faulty menstrual performance which they achieve by affecting the function of the ovary either directly or indirectly, through the mediation of the pituitary. The seemingly contradictory claims can be harmonized within the scope of an essentially uniform procedure.

Once the endocrine pathogenesis of acne is accepted, rational therapy must attempt to counteract the effects of androgen on the skin as the first and essential step toward a cure of the disease. Anti-androgenic therapy in the male, of course, is a more complex problem, for the straight, systemic administration of estrogens or any other anti-androgenic substance to the male does not seem safe, although excellent therapeutic results have been reported. (16)

It would seem far safer to treat acne in the male by topical application of estrogen to the affected areas of the skin. Such limited administration cannot cause sufficient absorption to elicit untoward systemic reactions, yet it is capable of opposing the androgenic stimulation of the sebaceous glands. The most suitable vehicle and technic of such topical therapy still remains to be developed although our preliminary experience in the application of this principle shows promise.

Anti-androgenic therapy in the female is far easier and permits two different ways of approach: 1. By directly opposing the androgenic effects by administration of estrogen; 2. Interference with or suppression of androgen secretion. Earlier, we tried the second way by using chorionic gonadotropins which are follicle stimulating if given in small amounts during the first half of the cycle, and are luteinizing when given in larger dosage during the second half of the cycle. The clinical results attained with this method were generally good but not always up to expectation. In a special group of patients in whom acne was associated with menorrhagia and dysmenorrhea, the well timed use of Prolactin controlled the menstrual disturbance as well as the associated acne. (20)

The effects of Prolactin would seem to be based on the luteotrophic properties of this hormone which support or correct the function of the lutein body.

Systemic administration of estrogens has been effective by using orally, Diethylstilbestrol in 0.5 to 2.0 mg. doses or comparable amounts of Ethinyl Estradiol (0.15 mg.), continuously in the male and with premenstrual interruption in the female. (16) Valid objections can be raised against such massive, continuous therapy which is likely to damage the testes in the male and upset the menstrual cycle in the female.

Recently, we have developed a method which seems more physiologic, safer, and yet, equally effective. Estrogen is administered *only* during the second half of the cycle beginning with the presumptive date of ovulation or even later, upon the first sign of a new skin lesion. One or two Premarin tablets, 0.05 mg., estinyl estradiol or 0.5 mg. stilbestrol daily was given until the onset of the menstrual flow. Considerable reduction in the number and severity of eruptions was noted already during the first month of treatment with absence of eruptions thereafter while the treatment lasted. In several patients who discontinued medication after two or three months a slight relapse occurred so that medication had to be resumed. The majority, however, remained free of symptoms even after termination of the treatment.

Oral estrogen administration during the lutein phase of the cycle is unlikely to disturb the menstrual performance; it remains to be seen whether this therapy will cause adverse effects in patients whose acne is associated with menorrhagia and dysmenorrhagia. In such circumstances, other procedures may prove preferable.

The anti-androgenic treatment of acne is aimed at the basic endocrine disorder and not meant to take care of advanced, chronic or complicated changes of the skin, especially the cystic type of acne, which requires specialized dermatological care. Even in such cases, it would seem advisable to combine the appropriate dermatological measures with oral estrogen therapy in order to eliminate the pathogenic hormonal factor which is likely to hinder the efforts of the dermatologist.

Bibliography

1. HINRICHSEN, J. and IVY, A. C.: *Arch Dermat. Syph.*, 37: 975, 1938.
2. GOLDZIEHER, M. A.: The adrenal glands in health and disease., *F. A. Davis, Phila.*, 1945.
3. WILE, BARNEY and BRADBURY: *Arch. Dermat. Syph.*, 39: 195, 1939.
4. LAWRENCE, C. H. and WERTHESSEN, N. T.: *New Internat. Clin.* 1: 199, 1942.
5. GEIST, S. H., SALMON, U. J., GAINES, J. A. and WALTER, R. I.: *Jour. Am. Med. Assn.*, 114: 1539, 1940.
6. HAMILTON, J. G.: *Jour. Clin. Endocr.*, 1: 570, 1941.
7. RONY, H. R. and ZAKON, S. J.: *Arch. Dermat. Syph.*, 52: 323, 1945.
8. GREENE, R. R., BURRILL, M. W. and THOMSON, D. M.: *Endocr.*, 27: 469, 1940.
9. PINCUS, G. and PERLMAN, W. H.: Vitamins and hormones, Vol. I: 293, *Academy Press*, 1945.
10. CULINER, A.: *Jour. Obst. Gyn., Brit. Emp.*, 52: 545, 1945.
11. PFIFFNER, J. J. and NORTH, H. B.: *Jour. Biol. Chem.*, 139: 855, 1941.
12. DORFMAN, R. I. and HAMILTON, J. B.: *Jour. Biol. Chem.*, 133: 753, 1940.
13. LESZCZYNSKY, R. and LIEBHARDT, S.: *Dermat. Ztschr.*, 94: 261, 1932.
14. v. STUDDIFORD, M. T.: *Arch. Dermat. Syph.*, 31: 3, 1935.
15. HOLLANDER, L. and SCHMITT, C. L.: *Penn. Med. Jour.*, 43: 249, 1939.
16. LAWRENCE, C. H. and WERTHESSEN, N. T.: *Jour. Clin. Endocr.*, 2: 636, 1942.
17. URBACH, E. and SCHILLER, W.: *Med. Klin.*, 33: 1701, 1937.
18. ROSENTHAL, T.: *Med. Clin. North. Amer.*, 20: 985, 1936.
19. LAWRENCE, C. H.: *Jour. Am. Med. Assn.*, 106: 983, 1936.
20. GOLDZIEHER, M. A.: *Jour. Clin. Endocr.*, 5: 132, 1945.

104 East 40 Street

MEDICAL ASPECTS OF THYROID DISEASE*

A Quiz for General Practitioners

ISRAEL BRAM, M. D.
Philadelphia, Pa.

Despite rapid advances in the knowledge of thyroid abnormalities, the busy general practitioner of medicine may still find himself at sea when faced with his next case of thyroid disturbance. Is the thyroid really disturbed? If so, is the abnormality primary or secondary? Is it disturbed structurally, functionally or both? Is treatment to be medical, radiological, surgical or a combination of these measures? What is the prognosis in the case before us?

These and other problems are encountered and the responsibility of the physician may be greater than expected. This is particularly brought to the fore if the patient presents a history of previous therapeutic failures, having undergone medical, or roentgenological, or surgical treatment without the reward of restored health.

The following series of questions and their answers are not intended as a substitute for a large treatise.** But they may serve as leads for the busy doctor anxious to guide his patient toward enduring recovery.

Introduction

1. *Is thyroid hypofunction or hyperfunction always associated with goiter?* Not always, but usually. About 20 percent of functional disturbances

* Modification of an address before the North End Medical Society and North Branch of the Philadelphia County Medical Society, March 20, 1947.

** Readers interested in the conservative treatment of goiter, especially Graves' disease, may be directed to my two monographs on the subject, viz: "Goiter: Nonsurgical types and treatment", **The Macmillan Co., New York** and "Exophthalmic goiter and its medical treatment", **C. V. Mosby Co., St. Louis.**

are not associated with tangible thyroid enlargement. Some of these may develop goiter later, especially in the case of exophthalmic goiter or Graves' disease.

2. *In the event of goiter with disturbed function, is the latter usually hypo- or usually hyperfunction?* Usually hyperfunction, either as toxic adenoma or exophthalmic goiter.

3. *In the event of goiter without functional disturbance, is it imperative to insist on treatment?* Yes. Aside from cosmetic considerations, a percentage of apparently innocent "lumps on the neck" become toxic, or may gravitate substernally and develop pressure symptoms, or may undergo malignant degeneration and endanger life itself.

4. *In the event of an oldstanding adenomatous or cystic goiter developing tenderness, pain or both, with or without pressure symptoms and some feverishness, what are the diagnostic possibilities?* Such a goiter may be undergoing (a) malignant changes, or (b) hemorrhage within the mass, or (c) thyroiditis, or (d) Riedel's disease or (e) Hashimoto's disease. These require expert discrimination and prompt treatment.

5. *Do goiters ever disappear spontaneously?* Yes, in a small percentage of cases. But this is taking a gambler's chance. Indifference and neglect of any goiter is dangerous. To adopt an attitude of, "Just leave it alone", or "just take a little iodine and it won't bother you", too frequently leads to trouble and even tragedy in later years.

6. *Is there a therapeutic classification of goiter?* Yes. Goiter may be classified into, (a) nonneoplastic or nonsurgical, exemplified by the colloid goiter of adolescence and the hyperplastic swelling of exophthalmic goiter (Graves' disease), and (b) neoplastic or surgical, as represented by adenomatous or cystic enlargements. However, because of occasional mixed pathology, this discrimination may be difficult at times. If neglected beyond the sixteenth year, a colloid goiter, usually responsive to medical treatment, may undergo adenomatous or cystic changes and require surgery.

7. *What determines the basic treatment of a case of goiter, the structural or the functional aspect of the case?* The structural aspect. Usually the functional aspect can be controlled by nonsurgical measures. The colloid and hypertrophic swelling of adolescence and the hyperplastic enlargement of Graves' disease respond satisfactorily to medical measures. All other goiters (toxic or nontoxic) require surgical attention. This means that, by and large, a little under 50 percent of all goiters require medical treatment; the remainder require surgery. In the event of substernal goiter with its pressure symptoms and threat of inaccessibility, surgery is the choice treatment regardless of its pathology.

8. *How would you further illustrate the discrimination between surgical and nonsurgical goiter?* Let us compare the normal thyroid gland to a small U-shaped sponge. Imagine the small dry U-shaped sponge dipped into a fluid. It will increase to several times its former size. Diagrammatically speaking, this "goiter" usually yields to appropriate medical attention. On the other hand, in your mind's eye attach a lemon or an orange or a baseball to this dry U-shaped sponge, and you have a diagrammatic picture of a surgical goiter. The enucleation of the attached mass is the logical treatment.

9. *What is the role of radiation in thyroid disease?* A: Radiation as a supplement in the medical treatment of exophthalmic goiter may expedite recovery. B: Employed preoperatively in toxic adenoma, radiation may render the surgical prognosis more favorable. C: Postoperatively in thyroid malignancy, radiation may improve the prognosis. D: X-ray examination in substernal goiter assists in the diagnosis of the extent of thyroid gravitation. E: Radiation is contraindicated in the colloid and hypertrophic goiters of adolescence (which require medical treatment) and in adenomatous and cystic goiters (which require surgical treatment).

Treatment of Colloid Goiter

10. *How effective is iodine in the treatment of colloid goiter of adolescence?* Iodine may prevent but does not cure colloid goiter. Colloid goiters treated with iodine usually become larger and may cause pressure symptoms and occasionally symptoms of hyperthyroidism.

11. *What is the logical treatment of colloid goiter?* Since this form of goiter is due to functional inadequacy of the thyroid, its logical treatment is, (a) the eradication of discoverable exciting causes such as infectious foci, and (b) the administration of thyroid substance under careful guidance, checked up by frequent basal metabolic studies. Usually, well within a year's time, such a goiter disappears.

Malignant Goiter

12. *What is the management of malignant goiter?* Since malignancy of a goiter is usually superimposed upon an oldstanding simple adenoma or cyst (surgical goiter), the prevention of malignancy is accomplished by early thyroidectomy of the preexisting simple adenoma or cyst. Cure of an existing malignancy of the thyroid is still unsatisfactory. When the diagnosis becomes obvious, surgical treatment may be too late for ideal results. The average treatment is early, skillful surgery supplemented by radiation. Radioactive iodine may supplant other forms of treatment in course of time.

Toxic Adenoma

13. *What is toxic adenoma?* This term connotes the clinical picture resembling that of poisoning by overdoses of thyroid substance or thyroxin, in the presence of an oldstanding simple adenoma or cyst. It is really an oldstanding surgical goiter gone functionally awry. Synonyms for toxic adenoma are secondary toxic goiter, Basedowified goiter, and hyperthyroidism with nodular goiter. The superimposition of hyperthyroidism usually takes place about 15 years after the incidence of the simple goiter.

14. *What is the difference between toxic adenoma and exophthalmic goiter?* Toxic adenoma and exophthalmic goiter are not different manifestations of the same disease. Toxic adenoma is true hyperthyroidism; Graves' disease is a much broader clinical problem. Specifically, in toxic adenoma the patient is much older. The condition begins with goiter and ends with thyroidectomy; exophthalmos is rare. In exophthalmic goiter the thyroid swelling, if present, is of recent origin and yields to medication; the patient is younger, and crises are typical. In toxic adenoma it is the neck that makes the body sick, while in exophthalmic goiter it is the body that makes the neck sick.

15. *What is the treatment of toxic adenoma?* Prevention of toxic adenoma consists of the timely surgical enucleation of the simple adenoma upon which toxicity was superimposed. Treatment of an already developed toxic adenoma is thyroidectomy, preceded by medical treatment to render surgery a relatively riskless procedure.

Exophthalmic Goiter

16. *What is exophthalmic goiter?* It is the syndrome commonly designated as Graves' disease, primary hyperthyroidism or hyperthyroidism with diffuse hyperplastic goiter. Since neither goiter nor exophthalmos need exist in an otherwise typical case of the disease, the term exophthalmic goiter is misleading and should become obsolete. The syndrome is a general neuro-endocrine dysfunction of insidious, rarely acute onset, characterized by nervousness, hypermetabolism, tremor, afebrile tachycardia, fatigability, dermographia, a relative immunity to cinchonism, and usually (not always) by thyroid hyperplasia and exophthalmos. The specific cause of the disease is still unknown. We know, however, that the cause does not reside in the thyroid gland. Also we know that "thyroidectomy, though capable of a large measure of practical success, is a good palliative, but palliation is not cure". In view of the author's clinical research over a period of about thirty-five years, it would appear that the conservative therapy of the disease is more effective and is more likely to result in enduring recovery than is thyroid ablation.

17. *What are the known etiological factors?* We agree with Warthin, Simpson, Moschcowitz and others that in this disease we are dealing with a congenitally predisposed personality, the "Graves' constitution" calling attention not to the thyroid but to the individual as a whole. Superimposed upon this predisposition is the exciting cause, usually in the nature of a psychic trauma, which instigates the syndrome. The victim may be regarded as highly allergic to situations classifiable as shock, such as grief, fright, excessive tension, worry and intense disappointment. There is little or no capacity for satisfactory adjustment to the adverse circumstances of life, and so the neuro-endocrine system yields to an abnormal pattern of behavior ordinarily designated as Graves' syndrome.

18. *With what diseases is exophthalmic goiter occasionally confused?* This disease must be carefully discriminated from neurocirculatory asthenia, gastric ulcer, nervous exhaustion, heart disease (especially paroxysmal tachycardia), diabetes mellitus, anxiety neurosis and occasionally a psychosis. In some misdiagnosed cases it is only after the appearance of swelling of the thyroid and bulging of the eyes that the true clinical picture becomes evident. It must be remembered that one or another of the above diseases may actually coexist as a complication.

Treatment of Exophthalmic Goiter

19. *What is meant by the medical treatment of exophthalmic goiter?* To within recent years the term "medical treatment of exophthalmic goiter" has been improperly defined. It has meant rest and iodization—a definition that is inadequate and responsible for the popularity of the equally inadequate surgical management of this affection. Treatment of this disease is not treatment for a lump on the neck. It is evident that the management of this disease requires the complexity of a broad, modern psychosomatic approach including a modified rest program, a well-balanced, adequate diet, a few well selected drugs, psychotherapy, and finally, a properly planned follow-up program as an assurance of permanency of recovery.

Rest

20. *What is the average rest program in treatment of exophthalmic goiter?* In the average case a special rest program is not imperative. Rest from *undue* physical and mental excitation, yes, but a prolonged stay in bed as an invalid is neither necessary nor desirable. Over 85 percent of our patients are ambulatory and most continue their usual tasks during treatment. If, however, the heart is enlarged and arrhythmic, everything must subserve circulatory stability and restoration of cardiac reserve, and so the patient must submit to a preliminary period of inactivity, following which he is managed as an average patient. In all cases, regardless of type, an early-to-bed routine is desirable.

Diet

21. *Is any special diet required?* Unless the patient is obese (an uncommon circumstance in Graves' disease) he must virtually eat his way to health. Tea, coffee, condiments, spices, and alcoholic substances are forbidden. Smoking, too, should be markedly reduced or stopped. Flesh foods may be given once a day. Bread and butter, cereals, the dairy products, fruit, and vegetables should be taken in maximal amounts if the patient is underweight. A patient responding promptly should gain on an average of 6 or 8 pounds during the first month, after which an average of a pound a week is quite saisfactory until the weight is restored to normal. Commonly the discharged patient weighs more than before the inception of the disease. A complicating high carbohydrate intolerance requires the indicated dietary consideration.

Drugs

22. *What drugs are serviceable?* In our experience, the drugs found useful in the management of Graves' disease are five in number: (a) quinine, (b) iodine (in minute doses), (c) prostigmine, (d)

the barbiturates, and (e) thiouracil. These are used singly or in combination.

(a) *Quinine.* In 1920 and on a number of occasions since, I called attention to the singular tolerance to quinine evidenced by nearly 95 percent of sufferers from active Graves' disease. Depending upon the severity of the syndrome, these patients are able to take from 30 to 90 grains of quinine sulfate or hydrobromide a day for weeks without developing cinchonism. When, as the patient improves, some evidences of cinchonism develop and it is necessary to reduce the medicament, we find that the symptomatology of the syndrome was ameliorated in parallel degree. And when finally normal intolerance to quinine appears, the patient is usually symptom-free. Aside from its use as a diagnostic test, the value of large doses of quinine in treatment is gratifying. The average dose given during the active stage of the syndrome is 5 to 20 or more grains two or three times a day. Allergy to quinine was encountered in approximately 3 percent of the patients, and it was for this reason that large doses were administered only under close control of the patient.

(b) *Iodine* is too often abused. In case of doubt it is best to omit this drug. If used, only minute doses will safeguard the patient against the unfortunate iodine-fast status. We favor an iodized calcium, not Lugol's solution. Sajodin is an excellent product. This is calcium iodobehenate, best given in doses of ½ to 1 grain daily in divided doses.

(c) *Prostigmine* is useful in selected cases. It reduces the violence of the heart action, reduces intraocular tension, and constricts the palpebral fissure. The effective dose is ½ to 1 tablet (7½ to 15 mg.) two or three times a day. In the presence of diarrhea, sialorrhea or severe sweating, prostigmine is contraindicated. Other contraindications are coronary disease and heart block, rather rare complications of exophthalmic goiter.

(d) *The Barbiturates* stand foremost as sedatives and for the prompt relief of insomnia, but care must be exercised in the selection of the product and dosage. Barbital in doses of 2 or 3 grains three times a day or phenobarbital in one third this dose usually serves the purpose. Within a few weeks, as the patient's general condition improves, this remedy may be tapered down and finally discontinued.

(e) *Thiouracil* may be given in the form of Propyl-thiouracil with relative safety. As a supplement in a broad regime of therapy, we have found this substance of value in a series of selected cases. Of course, the required leucocyte and metabolic studies must be made in these patients as a safeguard against side reactions.

Radioactive iodine recently came to the fore in the treatment of hyperthyroidism and thyroid malignancy. The number of cases treated to date is too small and the results are yet too uncertain to yield definite conclusions on the advantages and risks involved in the use of this measure.

Psychotherapy

23. *What are the principles involved in practical psychotherapy of exophthalmic goiter?* The doctor assuming responsibility in a case of this sort must devote ample time to his patient and employ the necessary tact and warmth and paternal spirit in efforts to correct discoverable maladjustments. Chief among these predicaments and perhaps at the top of the list may be mentioned "husband trouble", (i. e., a husband not particularly attached to his home) and "in-law trouble". The most important factor in psychotherapy is the indoctrination of the principles of *imperturbability* in the patient. Briefly stated, *imperturbability* is the fundamental attribute required of all who would replace habitual emotionalism by habitual reasoning and sane rationalization. The "consummation devoutly to be wish'd" is the serenity of mind and the cooperation that follow surrender of the emotions to an abiding faith in the Almighty, in self, and in the doctor.

24. *What is the course of the disease under appropriate medical treatment?* In the event of fair cooperation on the part of the patient and household the course is as follows: Within a few weeks the tachycardia becomes markedly improved, reaching normal within three or four months thereafter, depending largely upon the severity of the syndrome. Paralleling the heart improvement the weight rises and the basal metabolic rate drops gradually to normal. After a temporary slight increase in size, the thyroid undergoes gradual involution, finally reaching normal size only *after* the patient has enjoyed good general health for several months. The tremor usually disappears on the return of the basal metabolism to normal. Mild exophthalmos usually disappears with recession of the basal metabolic rate to normal; severe, chronic proptosis may persist for months or even a year or longer. But eventually the appearance of frozen fright becomes a past event. We have had no incidence of progressive exophthalmos following medical attention.

25. *What is the duration of treatment?* This depends upon the age of the patient, the duration and severity of the syndrome, the presence or absence of complications, and the degree of cooperation obtainable. Early cases require but several weeks of active attention. Rather severe Graves' disease commonly presents myocardial fatigue with auricular fibrillation and in some cases circulatory decompensation with anasarca; occasionally the basal metabolic rate exceeded plus 80 percent. Taking into account these factors, our patients are discharged from active treatment within 2 to 18 months of observation, the average being approximately 7.4 months.

26. *How about the permanency of recovery?* We have been able to follow up over 3,000 cases of Graves' disease for periods varying from 5 to 25 years. During active treatment our patients were observed at intervals of from once a week to once a month. Only eight percent were institutionalized for an average of five weeks, then discharged for ambulatory or home attention. When recovery was reached the follow-up period began. Depending upon the distance from the patient's residence, he or she was requested to appear for examination at intervals of three months to a year, the average examination being once in six months. Of our series

of patients followed up, 88 percent were normal insofar as exophthalmic goiter is concerned. The remaining 12 percent, almost invariably severe or chronic cases at the beginning of medical attention, presented some sequelae, especially mild to moderate exophthalmos or cardiac manifestations, chiefly objective, which did not materially interfere with social and economic usefulness.

Conclusions

Under medical treatment coupled with fair cooperation of all concerned, the average sufferer from exophthalmic goiter need not remain an invalid. With reasonably prompt attention to individual physical and psychological problems for a reasonable time and usually without material curtailment of customary activities, such a patient can be restored to normal health and normal life expectancy without thyroidectomy.

Finally, I would suggest that thyroidectomy in the management of nonneoplastic goiters, i.e., colloid and hyperplastic goiters—should not be taken for granted. The honors for enduring recovery can be divided almost equally between surgeons and internists. Taken by and large, nearly 50 percent of all goiters yield to medical measures. The remainder require surgery.

1633 Spruce Street

DYSTOCIC LABOR FOLLOWED BY AMENORRHEA AND DIABETES INSIPIDUS

A New Syndrome

MELVYN BERLIND, M. D., C. M., F. I. C. S., D-OG
Miami Beach, Fla.

Do three cases constitute a "new syndrome"? Well, they may. The three cases to be reported are so strikingly similar in their etiology, course and complications, that it appears not unlikely that a new syndrome, at least described here for the first time, has been added to our obstetric and gynecological nomenclature. Once the condition has been brought to the notice of the profession, we can be assured that it will be more frequently recognized. The report of such additional cases will substantiate the clinical entity of our title.

In essence, the syndrome is one of a protracted and difficult labor terminating in a forceps or version delivery or section, followed within 3 to 12 months by secondary amenorrhea and the development of typical diabetes insipidus with its characteristic, polyuria, polydipsia and polynocturia. Since it is his tremendous thirst with the passage of huge quantities of "water-like" urine that brings the patient to the doctor, the amenorrhea seems to be welcomed by most, a preliminary word about diabetes insipidus might not be amiss.

Diabetes insipidus is a disease characterized by the excretion of enormous amounts of urine—8, 10 to 15 pints a day—with the resultant loss of tissue fluids which has to be compensated by the ingestion of equal quantities of water. The urine is practically colorless, with a specific gravity of 1.002 to 1.006, does not contain sugar or albumin or any of the elements suggestive of renal involvement. The patients are made quite miserable by the necessity to urinate so often, particularly at night, and to be constantly drinking water. The disease, though most frequent in young adults, may occur at all ages. The onset is usually gradual, though it may be sudden.

Two classes of diabetes insipidus have been described.

1. Those where a gross and obvious lesion accounts for the condition: fracture of the base of the skull, cerebral tumor, lesions in or near the medulla oblongata, comprising thrombosis, softening, hemorrhage, small aneurysm, gumma, glioma or other neoplasm.

2. Those where no gross lesion is present; following fright or shock or even without any apparent cause. Many such cases are found during war, "the result of sheer funk" (French's *Differential Diagnosis*), but persisting after the soldier returns to civilian life. The cause of this type of diabetes insipidus presumably lies in the nervous system as well, but without changes that are as yet recognizable even with the microscope. A wellknown and characteristic feature of these cases is the way in which the polyuria, and consequently the polydipsia, is checked by the hypodermic injection of pituitrin.

Historically, the disease was first described by Johann Peter Frank in 1794. Cushing and his associates were the first to draw attention to the apparent hypophyseal relationship in 1912. In 1932 Zondek and his co-workers demonstrated the presence of intermedin, derived from the pars intermedia of the pituitary body. The most recent work of Sulzberger in the U. S. A. indicates that this may be the specific hormone regulating water metabolism.

Case Reports

Case I: L. P., white, age 23, primipara, with a completely negative medical and surgical history, went into labor at full-term, with the fetus in the right occiput posterior position. After being in active labor for 72 hours, with the bag of waters ruptured for over 50 hours, delivery of a living child

of 9 pounds took place by manual rotation of the head to the anterior position and the application of mid-forceps. Patient went into shock immediately following the delivery of the placenta. Blood loss was not excessive—estimated at 400 to 500 cc. Plasma, intravenous saline and one blood transfusion were given. The patient rapidly recovered and her remaining hospital stay was uneventful.

Menstruation began in two months and was regular for another four months, when, for no apparent reason, it failed to appear. With the disappearance of menses, the patient noticed that she began to pass tremendous quantities of urine during the day and night, associated with a marked thirst. "I could drink a quart of water every hour on the hour and still be thirsty". This condition persisted until she was seen by the writer for the first time, after 26 months of continuous amenorrhea and diabetes insipidus.

Case 2: M. S., white, age 32, para two, with a history of a spontaneous delivery of a child seven years ago with an uneventful postpartum course, went into labor at full-term. Bag of waters ruptured before the onset of labor pains. After being in labor for 110 hours, with the fetus in the R. O. T. position, "deep transverse arrest", delivery took place by forceps rotation with a resultant dead fetus, weight 9 pounds 3 ounces. The patient bled profusely immediately following the delivery and continued until the lacerated cervix was repaired. Her condition appeared poor. Plasma and blood transfusions were given, with gradual recovery, and the patient left the hospital on the fourteenth day.

Menses began one month following birth and continued normally for three months. At the fourth month uterine bleeding failed to appear, in place of which the patient had profuse nose-bleeds—so-called vicarious menstruation. (This case was particularly fascinating, in that the first menses brought on by treatment was similarly vicarious—nose-bleeds—followed by normal menstruation in the ensuing months). Menstruation, or nose-bleeds, failed to appear at the fifth month, and this continued until seen by the writer 10 months later. With the failure of menstruation patient began passing large quantities of clear urine, with a simultaneous increase in her drinking of large amounts of water. Various hormone injections—types unknown to author—failed to initiate menstruation. On two occasions pituitrin was given with temporary relief of the diabetes insipidus symptoms.

Case 3: L. G., white, age 22, primipara, with the history of having had an ovarian cyst removed at the age of 19 years, went into labor at full-term, with an unengaged fetal head. At the end of 48 hours of active labor (bag of waters ruptured 20 hours) a cesarean section (type?) was performed, with the delivery of a living male child weighing 8 pounds 7 ounces. Five grams of sulfanilamide were placed in the peritoneal cavity before closure. The patient had a stormy time post-operatively. "I was tremendously blown up and seemed to run a fever for 10 days," but cleared up the third week and was discharged in "satisfactory condition".

Patient subsequently menstruated once four weeks following the operation, after which menses failed to appear. Two months following this single period, she began passing massive quantities of urine, with the imbibition of similar amounts of water. It appeared that all the patients preferred ice-cold water. This patient was referred to the writer's office eight months following the section. No treatment had been received for her amenorrhea or diabetes insipidus up to this time.

Examination revealed all three patients in good general health, aside from the amenorrhea and diabetes insipidus. There had been no undue loss or gain in weight. Appetite and general wellbeing were satisfactory. Libido remained unchanged, indifferent in two, tolerated by the third patient, incidentally, a sad commentary on "marital warmth". Roentgenologic examinations of the sella turcica were negative, showing neither enlargement nor tumor.

Pelvic examinations revealed nothing striking: The uteri were not enlarged excepting moderate sub-involution in case 3, adnexae showed no unexpected pathology, and the cervix was scarred in case 2. Endometrial biopsy in all instances showed persistent estrogenic phase, markedly exaggerated in case 3. The urine was characteristic of that found in diabetes insipidus.

Treatment and Results

Treatment consisted of two phases: the injection of pituitrin to control the diabetes insipidus and, secondly, the "two-day treatment" of secondary amenorrhea as described by the author, (1) following the original work of Zondek. (2) This treatment consists of the intramuscular injection of 5 mg. of crystalline alpha-estradiol benzoate and 25 mg. of crystalline progesterone, both in peanut oil, divided over two successive days.*

Results of treatment: Bleeding ensued 4 to 7 days following the first injection in each of the three cases. In case 2, as mentioned, the first menses was replaced by nose-bleeds. The sudden cessation of polyuria and polydipsia following the injection of pituitrin was, as always, most striking. "Last night was the first time I slept for eight hours without running to the bathroom a half-dozen times". The diabetes insipidus apparently cleared up following the onset of menstruation and, after one or two weekly injections, no further need of pituitrin was required.

Hormone therapy was withheld the second month; none of the patients menstruated. In the third month the "two-day treatment" was followed by menstruation in all three cases. Menstruation occurred in the fourth and fifth months only as a result of hormone injections. In no instance did any of the patients menstruate spontaneously without hormone therapy, and further, the dosage could not be reduced. At present, therapy is being directed toward the stimulation of the ovaries by gonadotropins. A subsequent paper will reveal the results obtained.

* These preparations appear on the market as Di-Pro Ampuls (Roche-Organon) and Prometron (Schering).

Discussion

Three cases have been presented which show a striking similarity in onset, course and complications. In brief, these are: A difficult and prolonged labor terminating in a forceps, version or operative delivery resulting in surgical shock, followed in several months by secondary amenorrhea and the concomitant onset of typical diabetes insipidus. Spontaneous correction or amelioration of these conditions does not take place, at least within a period of two years (note case 1). The diabetes insipidus is readily relieved by the repeated hypodermic injection of pituitrin. However, with the onset of menses, albeit artificially produced, the condition clears up spontaneously. The amenorrhea remains permanent, up to two years so far as the presented cases are concerned, unless relieved by hormone therapy. The "two-day treatment" is in every way adequate to bring about menstruation, and in no case did it fail. This treatment must be given each month or else the patient fails to menstruate, and the polyuria and polydipsia return, though in a lessened degree.

At present attempts have been started to inaugurate menstruation by means of the gonadotropins. It is hoped that the resulting stimulation of the ovaries will be productive of a more "natural menstruation". Should the gonadotropins fail, mild roentgen stimulation of the pituitary body will be considered.

What causes this syndrome? Apparently there is an injury to the pituitary body as a result of the pregnancy and associated difficult operative delivery. It is not unlikely that the condition might occur in spontaneous and simple deliveries. This pituitary injury, whatever nature it might partake of, causes a lack of stimulation of the ovaries with failure of ovulation (absence of secretory endometrium) and amenorrhea. The diabetes insipidus is, as well, probably related to this same pituitary trauma (pars intermedia).

In way of passing, it may be added that pituitrin was given in only one of the cases following delivery, and is thus, apparently, not a causative factor. The picture of the patient following delivery (from hearsay), however, closely resembled that of "pituitary shock", as seen following the injection of pituitary extracts in sensitive persons.

Conclusion

A new syndrome has been presented which comprises:

1. Difficult labor and operative delivery immediately followed by a condition similar clinically to "pituitary shock".
2. Onset of secondary amenorrhea 3 to 12 months following delivery.
3. Concomitant onset with the amenorrhea of typical clinical diabetes insipidus.

Neither the amenorrhea nor the diabetes insipidus corrects itself spontaneously. Pituitary injections are specific for the diabetes insipidus, while the "two-day treatment" by estrogens and progesterone is equally effective in bringing on menstruation. With the omission of hormone therapy, menses does not occur. Treatment with the gonadotropins is at present being studied. X-ray stimulation of the pituitary body is being held in reserve as a last resort.

It is felt that with the publication of this paper many other cases of a similar nature will be brought to light. These will doubtless help to confirm the clinical syndrome here described.

Bibliography

1. Berlind, Melvyn: *Jour. Clin. Endocrin.* 3: 457, 1943.
2. Zondek, B.: *Jour. Am. Med. Assn.* 118: 705, 1942.

Lincoln Building.

A PRELIMINARY REPORT ON EXTRA-MURAL TREATMENT OF SEVERE DELIRIUM TREMENS WITH RECOVERY IN TEN HOURS

ROBERT V. SELIGER, M. D.
Baltimore, Md.

Delirium tremens is a familiar alcoholic mental disease characterized by visual hallucinations (seeing many animals and faces actually not present), accompanied by marked fear of the objects seen, confusion, disorientation for time, place and, in general, being out of contact or "off the beam."

Studies of patients with delirium tremens, or the "D. T.'s," reveal that they nearly always give a history of heavy drinking, eating very little, drinking more, and then not eating at all. Therefore, nutritional depletion (especially of vitamin B1) is a major factor in the production of this illness.

Due to the shortage in hospital beds both of general and specialized hospitals, and also due to the cost of private hospital for some people it has been necessary to develop extra-mural techniques for treating cases of acute alcoholism including the above defined disorder, delirium tremens.

Thoughts to the contrary, this can be quite easily done extra-murally in office practice with the help of a nurse or specially trained nurse's aide. After a short physical and neurological examination has been made, the patient is placed on a couch, given 1-2 grains phenobarbital and 3 grains sodium dilan-

tin (as an anti-convulsant). At the same time the arm is prepared for immediate intravenous injection of 1,000 to 2,000 cc of 10 percent dextrose in normal salt solution (isotonic solution of sodium chloride), which can be obtained from many hospital supply companies.

One removes the sealing material, inserts the tube of the intravenous needle set which can be purchased from such companies, and the drip intravenous flow is then started. As this goes on, 100,000 to 200,000 units of thiamin hydrochloride (vitamin B1) and 25 units of insulin are introduced into the tubing. One and a half hours later another dose of phenobarbital and sodium dilantin is given; another, two hours later; and a third dose about three hours later. No alcoholic beverage of any kind is given and all drinking of alcoholic beverages is immediately stopped. Candy and heavily sugared orange juice should be available if mild insulin shock reactions occur.

This treatment will clear up uncomplicated cases of D. T.'s in individuals under 55 in about 10 hours. In some instances it may be wise to administer another 1,000 cc of the intravenous with insulin and vitamin B1 on the following day, and for several days after the first visit the patient should be kept on phenobarbital grains 1 and sodium dilantin grains 3, t.i.d. and q.n. and from 50,000 to 100,000 units of vitamin B1 intramuscularly. The following case is illustrative of the good results obtained by using this procedure extra-murally.

A 37 year old white bartender, divorced two months, was brought in to us on June 25, 1947. For about three months he had been drinking daily one-fifth of whiskey with innumerable beer-chasers but had been able to work until June 19 when he stayed home and for the next two and a half days drank approximately 1½ to 2 fifths daily. On the night of the 21st he stopped abruptly and drank no more for the next four days. By the second day of abstinence he had become mildly visually hallucinated, was not sleeping or eating and taking no fluids of any sort. Progressively his delirium became worse so that members of his family had to restrain him by force. His visual hallucinations assumed vivid frightening aspects, such as large rats gnawing his feet, wild-eyed cats scrambling over his body, and flames which surrounded his bed. He was in this state when first seen by us on the 25th, and, as stated, had to be carried in for he could not walk, was mumbling, screaming, and obviously in great terror.

He was immediately sedated with phenobarbital and sodium dilantin, and placed in treatment room at about 11 a. m., for an intravenous injection of 2,000 cc of 10 percent dextrose in normal salt solution with 25 units of insulin and 400,000 units of Vitamin B1.

Throughout the intravenous procedure his visual hallucinations continued vividly, in quick alternation as he described and shrank from the hordes of rats gnawing at his body, the flames, and so on. After the first intravenous was completed, he continued delirious but in a comfortable relaxed manner, sometimes "tending bar", then garrulously talking with various acquaintances about old times, and most carefully smoking non-existent cigarettes—flicking the ashes into an equally non-existent ash tray, and also repairing watches.

This last phenomenon was quite impressive as he went through involved, precise and deft movements of actually repairing a specific watch, asking for various parts and at one point sharply rebuking the technician for handing him a stem belonging to another watch.

This condition lasted for about four hours, when he was given an additional 1,000 cc intravenous with the same amounts as before of insulin and vitamin B1. After absorption of nearly 500 cc he was able to answer simple questions (What is your name? Where are you?) in a monosyllabic but accurate and rational manner. At completion of treatment he was able to walk with very little support, and, at 6 p. m., only 7 hours after therapy had begun, he was entirely mentally clear and able to walk, though with a flail-like gait, to an automobile about 20 yards away and to climb in unassisted.

The next morning he returned and was given another 1,000 cc I. V., 25 units of insulin and 100,000 units of Vitamin B1. He had slept well and was quite calm, and entirely rational. The only residuals noted were a moderately severe polyneuritis involving chiefly the lower extremities, a feeling of great weakness, and tremor of hands. He remained at rest for several hours with mild sedation, was then given 300,000 units of Vitamin B1 intramuscularly and sedation for the night with orders for continued use of sugared orange juice. On the next day he was again given the same amount of Vitamin B1, but required no further I. V. nor medication, which was entirely discontinued. One week after he was first seen by us in an acutely delirious state he had entirely recovered, with appetite, spirits and sleep reported as excellent.

In conclusion, this preliminary report of patients with delirium tremens is presented to show that they can be treated extra-murally and rapidly by a very simple method. This expedient and practical technique has been used with safety and marked treatment success with increasing frequency by the author in the past five years in the uncomplicated cases of delirium tremens. Originally it was necessary to formulate a treatment technique due to unavailability of hospital beds and staff shortages.

2030 Park Ave.

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Urticaria pigmentosa was described by Nettleship in 1869 as "chronic urticaria leaving stains". The name was given by Sangster in 1879, but the disease is known as *Nettleship's disease.*

* * *

The disease which bears the names of the collaborators, *Fox and Fordyce disease,* indicates George Henry Fox, the American dermatologist of that name, one of the earliest specialists in this country.

WORK AS INTEGRATION

HENRY HARPER HART, M. D.
New York City

Some years ago a powerful, aggressive, and successful professional man consulted me about severe headaches and disturbing dreams occurring after the death of a superior in the office at which he was working. The death had been sudden and the whole project of the patient had been held up. He had dreams of killing his father who had died many years before. The death of the older colleague had revived the death wishes against the father with intense guilt and anxiety.

Nervous restlessness, tense headaches, and irritability seemed to be the expression of repressed hate at being frustrated. His powerful physique and farm upbringing had little physical outlet in the sedentary office work he was doing. Since he was not able to see me again for several months, he asked me for some specific suggestions. As it was impossible to bring to consciousness more than the recognition of hostility and guilt over the father and the older colleague, I suggested that he devote regular time to such aggressive physical activity as chopping of trees, boxing, hunting, and riding horseback. When he returned nine months later, he reported that his headaches had practically disappeared, and that he generally felt relieved.

This is a simple, obvious illustration of how a certain life of physical activity provided an outlet for repressed rage and hostility. Guilt was released by confession to the psychiatrist whose role was that of permissive father, not that of the hated repressive one. However, it is important to recognize in this, the integrative value of work by itself, quite apart from an attempt at further analysis of this man's problem and personality.

It is probable that hate and destructiveness based on frustration are the most disintegrative forces in the human organism. This is because social life condemns crude indiscriminate expression of these reactions, and they are prone to turn back on the self in conflicts. Our knowledge of the hypertensive individual suggests a conflict between aggression and submission, with the former turned inward because of guilt. Migraine is found in persons with the same situation. Primitive discharges of rage denied by the civilized super-ego (conscience) operate on a sub-conscious level and express themselves in constitutionally somatic channels.

The gulf between the demands of civilized life and its reality on one hand, and the instinctual drives on the other, must be bridged by the human ego or a psychosis results. It is not accidental that we have over half a million incarcerated psychotics in this country. Perhaps it is not coincidental that the more civilized we are the more destructive are our wars.

Work provides a synthetic force for the ego which can help to bridge the gap in the form of effective sublimation of the instinct drives. These sublimations vary in degree of complexity and in their capacity to satisfy these drives. Intelligence, muscular strength, speed, coordination, judgment, verbalization, inventive capacity, creative originality and endurance, are the resources which different jobs demand of us to a varying degree. Fitting the man to the job and vice versa is inherent in the integrative role of work and mastery.

One proof of this integrating function of work is the use the compulsive neurotic, so typical of our time, makes of it in staving off his anxiety. The great slave drivers of modern industry with their assembly lines, production charts and dehumanized mechanical efficiency, find magnificent outlets for their compulsive sadism in work. By elevating work to a cult they escape the sense of guilt from slave driving.

Our successful executives are like a Brahman caste in which the obsession of efficiency and acquisitiveness replace the complicated ritual of defecation and lustration of the latter. The successful descendent of Calvinistic puritanism has his sacred industrial cow to worship. Such men when removed from work tend to organize their play into work. They are always competing with themselves when they have no one else to compete with.

How, we may ask, does work act so protectively in the compulsive neurotic against his instinctive drives? For men may live their entire lives in this way without consciously perceiving the underlying anxiety and guilt within, or the nature of their Oedipal conflicts.

It is probable that conscience and instinctual aggressions are simultaneously satisfied as in the fanaticism of Mohammed, Savonarola, Torquemada or Hitler. The compulsive neurotic persecutes his fellow man with the blessing of God as it were and hence he loses little sleep over his sadism. What wrecks him is reality.

Why then is work integrative? How does it operate so effectively to reduce human conflict and deterioration? What explains the salvation which the compulsive neurotic secures in work? Psychoanalysis has brought to light the following reasons:

1: Work satisfies object libidinal desires. We have a need for persons and things in our lives to which we can direct our interests and love. We seldom work alone, but usually with and for others. The solitary writer or musician always has his unseen audience. We work to please others, to satisfy their demands and to feel sure that we are useful to them. Factory work is often preferred by young women to housework not because it is less monotonous but because it makes them members of a

group. Freud showed that work in common, sublimated our homosexual love. Men who work in teams and partnerships sublimate their homosexuality very effectively. Heterosexuality, too, can often be sublimated as in the case of the secretary who devotes her life to her boss without ever sitting on his lap. The unmarried school teacher finds both her maternal and sadistic drives given acceptable outlets in the public school. The actor or dancer exhibits himself with social esteem, even adoration.

2: Sadistic, destructive, aggressive drives are taken care of in many kinds of work such as carpentry, house wrecking, blasting, engineering, surgery, pugilism, police, fire, and forestry patrols. All these jobs employ destruction and demolition as preparatory for construction. Scarcely any work exists, however, without some outlets for aggression. Oral aggression can be satisfied in the pulpit, law court, the political platform, or in commercial selling.

3: Work satisfies narcissistic libido, in terms of ambition, mastery, increased respect and attention of others and the generally enhanced prestige that comes from the reputation of doing a job well. Our narcissism is given a firm foundation in reality. Everyone likes to think of himself as a good workman. In no employment agency will one encounter persons who depreciate their abilities and capacities. Only infantile narcissism can be content without work achievement. Prestige, social recognition, exhibitionistic urges, hover on the borderline between object and narcissistic libidinal satisfaction. Hence it can be realized how a disappointing love affair can lose some of its painfulness in devotion to a job, or how a conceited dreamer may win appreciation from others by a job well done.

4: Work involves continuous adaptation to reality. It is progressive, not regressive, in proportion to the attention it demands. The need to observe carefully, measure, perceive, and copy, utilizes our sensory, motor apparatus continuously so that complicated techniques are learned and become automatic. Thinking when directed to the solution of real problems becomes logical rather than autistic, leading to mastery, not escape. Work removes a person from sexual phantasies which in our culture are associated with guilt and beget conflicts. Work, because it is serious, demands logical thinking, since problems involve complicated relations to an ever-changing reality. A good carpenter is seldom an impractical man.

5: Properly selected work should overcome frustration which is such a decisive force in personality disintegration. The more we become acquainted with the job, the less frustration we experience because more and more of its difficulties are surmounted. In emergencies and political crises we turn to persons who have solved many problems successfully, rather than to persons who have had years of unemployment in which to rest their brains. Prolonged unemployment increases frustration, inertia, passivity, and disintegration. The techniques of mastery are lost in disuse.

6: Work overcomes the ambivalence of psychic immaturity since the splitting of ambivalence is the only way we have of surmounting it. We turn the hate component into useful destruction, and the love component into social service. A neurotic, ambivalent person joining a political campaign can direct his hate component against the political opposition while directing the love component to his comrades and leaders. Hitler used group enterprise very effectively in this way in his integrating Germany into a conquering war machine, preferring disintegration from without to disintegration from within. The medical profession, by directing hostility to the disease process, enables love of the patient to be constructive and beneficial. The lawyer also effectively escapes his ambivalence by supporting his client in the battle of legal wits.

In order to understand why work is ego-synthetic, we might inquire into what synthesis itself consists. It is closely related to meaning which is actually the essence of synthesis. When we establish new meaning we bring together new combinations of engrams which have a functional coherence. Meaning is the opposite of dissociation. When we do or say something that we do not understand, it seems like a foreign body, isolated and detached from the rest of us, in other words dissociated. When meaning is established, dissociation disappears. The child's "syncretism" using Piaget's phrase, its tendency to grasp things according to a pattern or gestalt of things coexisting in time, space and feeling, however accidental, is a form of synthesis not too remote from the way most of us think. I mean by this that we tend like animals to accept accidental relationships as permanent and necessary.

Synthesis, which is the bringing together of objects, has for its purpose mastery or appropriate adaptation. If a person brings together a number of objects or ideas we exclaim "so what?", indicating that we expect some functional result, i. e., meaning. Schilder has pointed out that we cannot perceive without acting, and that every sensual experience brings with it a tendency to action. Thinking modifies even our body posture and muscular tension. When it is unaccompanied by appropriate motor response, it is suspect as a form of escape from reality.

Bringing together of elements which result in no functioning mastery is a faulty synthesis, possibly a trial and error stage in the solving of problems. I may bring together an old hat, a rooster, and a pile of bricks, but they do not form more than a gestalt until I combine them into some functioning unity. If I capture the rooster with the old hat and fence him in with the bricks, I make a loose functioning synthesis, since the three elements are not the most appropriate for the action itself. It will undoubtedly be worth while to bring these three elements into a functioning relationship even of temporary nature. In this respect an effective synthesis is like a stable compound whereas an ineffective synthesis is like an unstable compound, as water might be compared with hydrogen peroxide.

If we place an apple tree in a dark hemlock forest, it will die, but in a sunny field with good loam it will

flourish. Mastery in agriculture as in mechanical engineering seems derived from successful synthesis for a purpose. The farmer who forgets to milk his cow or neglects to put a roof over his barn neglects elements in a necessary purposive synthesis so that his compounds are unstable. After a time there may be no cattle, then no barn, and eventually no farmer.

Thus, it becomes clear that the establishment of a new and effective synthesis is a necessary element in the mastery of reality as well as in creative work. The coordination of forces in four dimensions decides whether a football team will be victorious or not. All work can then be evaluated according to the degree of purposive mastery of reality, in other words, meaning.

Meaning and mastery go hand in hand. Work which had neither meaning nor mastery would be repetitive and automatic like a tread mill.

We conclude, therefore, that not all work *per se* is integrative. In order that it be so, certain conditions must be present. The will to work is in itself a sign of a certain degree of integration, just as an engine that works is more functionally integrated than one that produces not a single movement. A certain analogy between machinery and living matter is apparent here, for both disintegrate with inactivity. Without the pressure of reality demands, living creatures regress to inertia. Work is not inherently an *id* process but derives its incentive from ego and super ego through the pressure of reality and the need to please.

The enjoyment of one's work implies a harmonious team-work of ego, super ego, and id, not such a commonplace phenomenon in modern man as one might expect. We can therefore explore with profit the conditions in the work situation which hinder the integration of personality. Since work is often what we make it, the very conditions unfavorable to integration may also be expressions of disintegration.

Among the conditions in the work situation which are disintegrative to personality may be listed: 1, monotony; 2, insecurity and anxiety; 3, fatigue; 4, isolation; 5, absence of goal; 6, anti-instinctual defense mechanisms; 7, unsuitability; 8, miscellaneous frustration.

We may consider these conditions briefly for a thorough study of them would require a volume and not a paper. Our first factor, monotony, which implies a mere repetition of a limited number of actions, until intelligence is no longer challenged and automatism takes over, is disintegrative in that factory workers tend to compensate with phantasy for the absence of intellectual challenge. It is as if two chess players instead of playing a new game each day were to repeat the same moves day after day. No thinking would be required and the pleasure of the game would be lost. The proof that automatic routine is disintegrative is to be found in the nervous breakdown of persons who are suddenly forced out of routine jobs they have held for years. A false security was established which reality shattered with a single blow.

There is much insecurity and anxiety in modern industry. Because promotions are not invariably dependent upon excellence of achievement but often upon favoritism, family ties, personal jealousies, and rivalries, or the ruthless cutting of personnel in policy changes, the modern office holder, even in civil service, is never too sure of his job from one year to the next.

Insecurity intensifies competition and jealousy, mistrust and indulgence in Machiavellian intrigue, which foment further hate and mistrust. Industrial leaders who because of their own schizoid or compulsive character must treat human beings as machines do not give or get true security in their work. The worker himself, because of insecurity, devaluates the job because he cannot identify with it. Where dishonest practices are forced upon sincere and honest personnel, neurotic conflict between conscience and the craving for dependence result.

Fatigue is a factor in personality disintegration which looks simpler than it really is. There is fatigue due to conflict, and fatigue due to over-exertion, and more often than not, they are confused with one another. Where work demands more energy than one can offer, fatigue results with decline in both personal confidence and productive efficiency.

Battle fatigue in war time exemplified this perfectly. Sleeplessness, exhaustion, and fear of death reduce the ego's capacity to adapt so that regression to helplessness results. Irritability and aggressiveness are the first symptoms of decreasing mastery occurring when a task seems futile and purposeless. Curiously enough, neurasthenic fatigue diminishes with work and increases with idleness, indicating the need to carefully evaluate the phenomenon called fatigue before we attribute it to working conditions.

Isolation in its many forms is as disintegrative according to the need we have for human companionship. Many asocial persons with hate and mistrust of their fellows prefer solitude and the company of animals. Farmers, lighthouse keepers, night watchmen, soldiers in lonely posts feel less threatened when their hatreds and aggression are unroused by personal contacts. But for most civilized folk isolation from friends is unbearable. Most soldiers would prefer to be in the firing line with their buddies than alone or among strangers in a safe post.

The suicides of our troops in the dreary isolation of the Aleutians testified to the need for cheerful recreation and variety of activity in the modern man. Isolation may remove the creative man from destruction but he, too, needs companionship when not working.

Isolation has an effect upon us similar to monotony for it intensifies autistic thinking and inertia. Otherwise all stimulation to activity must come from within which demands a resourcefulness and integration well beyond average capacities.

When there is no apparent purpose in our job, an attitude of apathy and inefficiency results or else submissive compulsive correctness. People usually like to know what they are working for. Commanders in the recent war found that when the men knew

the purpose of their enterprise and its expected hardships, they gave their leaders more enthusiastic cooperation.

Having goals is an expression of synthesis. Purposelessness carried its own death warrant. Profit-sharing and cooperation of labor and management in industry bring greater meaning to the job than the widespread irresponsibility of class conflict. Many of the unemployed and unemployable are persons whose work pattern has shown no life plan. These persons are like drift wood, mere passive objects responding to the pressure of the moment.

6: Defense mechanisms against instinctual forces, though part of our character formation, have the effect of limiting the amount of work energy available. This is because of the energy expended on repression. Self-punishment in the form of exhausting, time-consuming, scrubbing and scouring in which the housewife atones for unconscious guilt, is a good example. Work often fails if based on revenge motives such as defiant successfulness or over-ambitious striving based on identification with others with totally different capacities. Penis-envy and the desire to be independent of, or superior to men is a strong driving force in many women dominated by their castration complex who enter into competitive striving with men at the expense of their repressed feminine cravings.

Reaction-formation against instinctual urges, expressed in vice-reform, anti-vivisectionist crusades, and various religious and political fanaticisms, draw their energy not from instinct but from the defense against it. These defense mechanisms are not integrative because they do not make use of but repress the source of the energy of life, our instinctual drives.

Does modern industry promote integration or disintegration of the personality? This is a moot point. Some declare that the workman is made into an automaton by mass production and is no longer called upon to show the resourcefulness, adaptability, and planfulness of the days when he was personally known by his work. The anonymity of modern mass production no longer permits a worker to identify with his product but only with his productivity. It is as if a woman were never allowed to see her children again after bearing them, and that they were mixed up with the babies of other women in an assembly line. Still, there are many jobs which demand initiative and preserve resourcefulness.

A review of the workers of New Hope, Pennsylvania, revealed that only about a third of the workers were discontented with their jobs and in these the relations with other people were in most instances none too satisfactory.

Just as emotional maladjustment was present in those who never find work satisfactory, so according to the Bureau of Vocational Guidance at Harvard, of 4300 men discharged from a variety of establishments, twice as many were fired for faulty personality traits as for lack of technical knowledge. Kent found that carelessness, failure to cooperate, and laziness were the chief causes of 3600 discharges from 75 companies.

We cannot wholly blame the job for the faulty integration of the individual. A well-integrated person with a definite goal in life does not stick to a monotonous unrewarding job long but uses it as a stepping stone to something better. The analysis of 10,000 people by the personnel adviser, University of Southern California, revealed that 90 percent had no definite aim in life. Freud spoke of the masses as hostile to the culture which demanded the renunciation of individual satisfaction.

It is probable that the average man does not demand for himself much integration and coordination of effort but prefers others to take care of him so that he may satisfy his instinctual demands. Not granted the capacity for sublimation the average man resents a culture in which great ability to deny immediate instinctual satisfaction is a requisite for success.

In what way can modern industry provide for the average man so that he is permanently contented? Actually, according to the New Hope and other studies, two-thirds of the workers are contented and demand little more from their jobs than what they get.

It is probable that given security of a permanent job, pleasant companionship, comfortable living conditions, and the opportunity to have a home and family without anxiety over the future, the average workman will remain contented with his job for many years. Its monotony does not disturb him for the presence of his pals, conversation, jokes, and even songs can make the routine tasks positively enjoyable. It is a source of security which does not tax him beyond his resources.

What can we say of integration when the average man is contented with routine work which does not increase his resourcefulness and thinking power? If monotonous work is not integrative but disintegrative, why is it so acceptable to the average man? If routine monotonous tasks are disintegrative, to whom are they disintegrative? Placing a man in a job that is too big for him can be as disintegrative as placing him in one that is too limited. The first begets anxiety, the second day-dreaming and flight from reality. Our question may be answered in this way, that the misfit job is disintegrative when it does not give adequate outlet to the person's capacities or demands more of these than he possesses.

Munsterberg was probably correct in declaring that the monotony of work depends less upon the work itself than upon the special disposition of the individual. We may say, then, that monotony and repetitiousness is disintegrative to him who cannot use it for constructive purposes.

This leads us to the problem of the misfit. He is the person who holds a job for which he is not suitable. Persons with a wide range of aptitudes fit into many different jobs without difficulty. It is the person with a special aptitude or a special inaptitude who is liable to feel most frustrated in his work.

I can recall a heavy-set fellow who felt cramped by a clerical job at a desk, not to mention an overprotective wife and mother, and who got free of phobias by working with the State Forestry Corps

where he felt free and could exercise his muscles, and live in the fresh air of the country. A very individualistic, original, enterprising specialist in sporting goods found himself free of a paranoid attitude to his associates when he had a shop of his own and away from the routine and supervision of a department store. Passive, dependent, anxious personalities adjust quite well to bureaucratic jobs where they are told precisely what they are to do, and are not required to think, and from which they are not likely to be fired for inefficiency.

But work does not express personality simply because of aptitude tests. These can show constitutional limitations and abilities in various lines of work, but they cannot give us more than a conscious formulation of what we want to do. This is because self-defeating and other patterns referred to above require much time, pain, and effort to unravel.

Work alone is therefore not integrative *per se* to solve such unconscious conflicts resulting in work failure. Work would only afford another opportunity to repeat the unconscious pattern of self defeat, reflected consciously in convictions of unkind fate. Until these unconscious obstacles to success are removed from a man, his work seldom expresses his entire or integrated personality.

1150 Fifth Ave.

THE MODERN CONCEPTS OF CARDIAC NEUROSES

N. STUART GILBERT, M. D.
Miami Beach, Fla.

The cardiac neuroses have been much discussed in the literature of the past few years. However, there has been a lack of clear cut classification of these disorders, and a good deal of confusion pertaining to their etiology. In defining cardiac neurosis, it can be simply stated as the presence of a train of cardiovascular symptoms, subjectively presented by the patient, with a complete lack of any objective findings.

The production of the clinical picture of cardiac neurosis is traceable to the presence of an autonomic imbalance which in turn is a product of an oversensitized hypothalamus. When the cumulative effects of the afferent impulses into the hypothalamus reach an explosive point there is a discharge through the autonomic nerve system to the sensitively balanced cardiac and vascular mechanism.

Classification of Cardiac Neuroses:

1—Adolescent form.
2—Adult form.
3—Psychosomatic form.

Adolescent Form:

The syndrome commonly known as neurocirculatory asthenia can be better understood under the classification of adolescent cardiac neurosis, as this term more clearly brings to the surface the true significance of the syndrome. The terms: Soldier's heart, effort syndrome, and anxiety neurosis, are also less adequately descriptive of this condition.

If a careful history is taken in patients of this type, the onset of their symptoms can most often be traced to, between the sixteenth and eighteenth years. The manifestations beset the individual suddenly. Within several weeks, from a state of perfect health and ability to sustained effort, they become afflicted with a peculiar sighing type of dyspnea, palpitation, precordial distress, irregular heart action, coarse tremors, sweating, dizziness, faintness, and nervousness. There is rarely any history of acute infection or acute psychic strain preceding the onset of the syndrome.

However, there has been a very violent insidious conflict raging within these young people during their entire adolescence, subconscious to be sure, and therefore, unrevealed to the victim and to the observer.

The greater the appreciation of moral values by the individual, the greater the conflict, and the more violent the emotional explosion, and the subsequent projection upon the cardiovascular mechanism. Since the preoccupying problem of the adolescent is his struggle for adjustment between his personality and his newly awakened sex activities, it is very obvious that his anxiety has its roots here.

Adolescent cardiac neurosis is more common in females, and this is easily understandable because of their more highly sensitized nervous system, and their greater difficulties in the problem of sexual adjustment.

Some workers point to the presence of an asthenic type of heart in such individuals, which is unable to respond to the ordinary efforts of every day life. This theory, however, seems to be inconsistent with several known facts. The disease does not occur before adolescence, then why should an asthenic heart await these many years to make itself heard from? Furthermore, the onset of symptomatology is not gradual, but abrupt, from apparent normal coordinated cardiovascular action to one of extreme disorder. And yet, all this has taken place without any obvious causative factor in operation. It is also true, that these patients can produce a full display of their symptoms while at rest, and that they are capable of an amazing amount of physical effort under suitable emotional conditions.

It is a well known fact, that severe emotional stress, such as that encountered in military life, may accentuate their symptoms, or incapacitate these individuals for the first time.

These new adult emotional experiences have simply added additional anxieties to an individual

already burdened with a basic anxiety carried over from a complexed adolescence, whose subjective complaints may have been previously less pronounced, or carefully concealed.

The therapy of adolescent cardiac neurosis is in the main, one of prophylactic psychiatry. It is my opinion that a short course of superficial analysis should be given to all adolescents, not only as a preventative of this increasingly common form of cardiovascular neurosis, but a host of other organ neuroses whose etiology is so closely interwoven with a poorly adjusted emergence from the adolescent battle field. In well established cases of adolescent cardiovascular neurosis, the need for thorough psychoanalytic study is urgent, and no measure of success can be hoped for without the close cooperation of the psychiatrist. Such patients should be encouraged to continue their regular occupations, even though these require the expenditure of large amounts of physical energy. They must be ordered to carry on despite the presence of symptoms.

If these people are placed on routines of rest or sedentary occupations, they will be further victimized by a deeper fixation, and subsequent enlargement of their entire series of complaints. Tobacco or alcohol, if used in moderation, should not be withdrawn, as their use is neither a causative nor an aggravating factor in their complaints. In fact, tobacco and alcohol may very well serve as temporary escapes from the anxiety concerning their cardiovascular complaints.

Case Report: Mr. J. B., age 37, lawyer, complained of dyspnea and sighing respirations at rest. Dyspnea was increased upon effort and emotion. Frequent bouts of palpitation occurring at rest as well as during effort. His dyspnea became more pronounced during his attacks of palpitation. He also complained of becoming extremely fatigued even upon slight effort. In addition, he stated that he had skipped heart beats at intervals, and frequent attacks of pain or pressure over the precordium, which was aggravated by emotion, and occasionally upon effort.

He complained of a course tremor of both hands, and attacks of drenching perspiration. He was informed by several insurance examiners, in the past, that his blood pressure was subject to marked variations. He was rejected by the Army because of hypertension.

The patient's childhood and family histories were irrelevant. He was in perfect health, and was active in school sports until the age of seventeen years. It was at this age that all the above related symptoms developed in the short space of a few months.

Because of his complaints he was unable to partake in athletics or work requiring even slight exertion. He was convinced he had heart trouble, a self-made diagnosis with which several practitioners he consulted concurred in. He has led an extremely sedentary life since the age of seventeen years.

Physical examination revealed a markedly disturbed emotional personality. His pulse varied from 90 to 120. His blood pressure varied from 170/100 to 120/80 during repeated readings for a period of one hour. The thyroid was not palpable. There was marked axillary perspiration. The heart borders were normal to percussion. The apical beat was forceful and rapid. There were no murmurs present. The heart sounds were loud and had a metallic ring to them. A few premature ventricular beats were present. The lungs were clear. The abdomen was normal. The patellar reflexes were increased. The hands presented a coarse tremor. Fluoroscopy revealed an overactive but normal sized heart. The electrocardiograms in both the standard and precordial leads were normal. The B.M.R. was plus 2 percent, urine analysis was negative, the blood Wasserman was negative. The vital capacity was 90 percent, the hemoglobin 90 percent and R.B.C. 4,800,000. The white count and differential were normal.

In view of the normal findings upon examination, and the sudden onset of the entire syndrome at the age of seventeen years, in an individual of obvious emotional instability, he was tactfully questioned about his adolescent emotional life. During the interview he related that he practiced onanism from the age of twelve to sixteen years, and that he stopped this practice because he thought it was a sin to perform such an act. He further related that he felt very much ashamed of himself because of this, and that he feared mental and physical deterioration as a result would ensue in the future.

The patient was referred for psychotherapy, with particular emphasis to be placed on the guilt complex rooted in his adolescence. After eighteen months of psychotherapy, the patient was completely convinced of the absence of organic heart disease, and was entirely liberated from the grip of his annoying train of symptoms. He is now able to enjoy a vigorous active life, and has become a well integrated personality.

Adult Cardiac Neurosis

The knowledge of the behavior of adult cardiac neurosis is of urgent importance to the general practitioner and the cardiologist, for it is to them that such patients come to seek relief. The group affected by this syndrome falls in the middle age of the population, and usually in the higher cultural levels. The anxiety neurosis which seems to be the etiological factor is related to a maladjustment to the day by day problems of the individual. There is no deep rooted neurosis here, but simply an inability to meet the realistic demands of present day complex existance.

The clinical picture presented by this group is in the main concerned with alterations in the cardiac rate and rhythm. The most common of these is an explosive tachycardia with disquieting palpitation and an accompanying chest oppression. The dyspnea which is complained of during these episodes is not associated with an increase in respiratory rate, but is in the main, a subjective air hunger. Occasionally one sees such patients with paroxysmal auricular fibrillation.

It is important to delineate this functional form of fibrillation from those due to organic heart disease or thyrotoxicosis. The most valuable differential point here is the paroxysmal nature of the cardiac

arrythmia in the absence of any demonstrable organic heart disease, or evidences of thyroid hyperactivity. Another common manifestation of adult cardiac neurosis is the presence of premature ventricular systoles.

This irregularity differs from both paroxysmal tachycardia and paroxysmal auricular fibrillation in that the duration of premature ventricular beats may continue for days or even weeks. In addition to the *flopping heart action*, these patients very frequently complain of precordial pain. The latter has been ascribed to a contusion of the intercostal muscles by the force of the premature ventricular beat. In the past, it has been the custom to explain this irregularity as due to tobacco or coffee.

In view of the fact that ventricular premature beats occur in abstainers from tobacco and coffee, and fails to improve with the discontinuance of these agents, it is my opinion that this irregularity is due to a cardiac neurosis. However, when premature ventricular systoles are found in the presence of obvious heart disease, there is no doubt that the accompanying myocardial fibrosis is responsible for their occurrence. Because of the prolonged duration of this irregularity, and the presence of precordial pain, these patients form the most disturbed group of cardiac neurotics.

Adult cardiac neurosis may at times express itself in the form of blood pressure instability. The variation in the blood pressure may not only involve the systolic measurements, but the diastolic as well. These patients are so extremely blood pressure conscious, that the mere application of the sphygmomanometer cuff will produce a marked blood pressure elevation. Readings taken upon them during sleep have been found to be normal despite high readings recorded during their waking hours.

An accompanying tachycardia often occurs simultaneously when such individuals are having their blood pressure recorded. Not only will the blood pressure vary from day to day, but marked liability can be recorded in a series of readings taken within the period of fifteen to twenty minutes. Although this type of patient has presented the examiner with elevated readings for many years there is a distinct absence of cardiac hypertrophy or electrocardiographic changes usually associated with left ventricular preponderance.

Therapeutic wisdom should teach us to discourage these patients from frequent visits to us for the sole purpose of having their blood pressure recorded.

Case Report: Mrs. J. W., married, age 39. Three months prior to her examination she developed palpitation, tachycardia, dyspnea upon slight exertion, dizziness, weakness, and became easily fatigued. Her fatigue was not related to effort, and was in evidence even after a good night's rest. Her dizziness was most marked when she was confined to crowded places. These symptoms were progressive, and seriously interfered with her daily activities.

Physical examination: Her weight was 208 pounds; height, 65 inches, vital capacity, 88 percent. Pulse rate was 100, and blood pressure was 150/90 on both arms. The thyroid gland was not palpable. The lungs were normal, the heart was within normal limits to percussion, excellent heart tones and no murmurs were present. Examination of the abdomen was normal. Fluoroscopy revealed a normal sized heart with a slight widening of the aorta. The electrocardiogram was entirely normal in the standard and precordial leads, except for a sinus tachycardia. The B.M.R. was minus 2 percent.

The patient was informed that her examination revealed no evidences of cardiovascular disease. In a discussion with her relative to her domestic life, she revealed that her husband was in the habit of working late hours, and therefore, she was deprived of his companionship. In addition, her husband recently joined a fraternal organization which made still further inroads upon his time.

On several occasions, her husband made some references to her obesity which she felt were uncomplimentary. It was evident that this patient developed an anxiety reaction based upon her insecure relationship with her mate. In most instances such anxieties are channeled off into drives, and thus become so dissipated in the process through the consumption of emotional energy.

However, because of the associated weakness and fatigue which was part of this patient's neurosis, the development of a drive was impossible. In its search for release, her excess emotional energy became attached to an organ, namely the heart, in this instance, and made its escape in the form of cardiac overactivity.

After several sessions of frank discussions with the patient, she quickly gained insight into her neurosis, and the mechanism of her escape into illness. She has now made a complete recovery, and is entirely free of her former symptoms.

Cardiac Psychosomatic Neurosis

Unlike the two previous forms of cardiac neurosis in which the clinical picture presented was in no way related to the presence of organic heart disease, we are here confronted with cardiac pathology and a superimposed cardiac neurosis of varying degree. It is safe to say that the patient with heart disease who does not present some anxiety towards his disease is indeed a rarity. It is not unusual to see individuals with stable personalities rapidly deteriorate into unmanageable psychoneurotics when they become cognizant of the existence of heart disease.

Physicians spend much painstaking effort in arriving at a diagnosis of the presence of heart disease, and yet, little or no time is spent in the proper orientation of the patient to his disease.

It must be remembered that mental scars can be far more devastating than those of a valve or an infarct. In the management of patients with coronary disease or occlusion, the importance of the physician's approach must here be stressed.

The medical attendant must be calm, reassuring, solicitous, and attentive from his initial contact with his patient. He must radiate an aura of confidence born out of his complete sincerity in his relations with his patient. The emotional reaction of the members of the patient's family must be recognized,

and properly directed, lest this source form a reservoir for enhancing the patient's anxiety. In addition, the nursing personnel must be carefully selected upon the basis of their emotional maturity, and given careful instructions upon the importance of allaying the patient's fears and resultant anxieties.

A patient thus treated, is by far, better prepared for his ordeal, and will respond in a more gratifying manner to his therapy. Not only will such a patient become more cooperative, but he will present us with a positive and spontaneous desire to get well.

Summary

An attempt has here been made to classify the cardiac neuroses. The classification has been made upon an etiological basis, thereby permitting a more understandable approach to therapy.

The *adolescent form* of cardiac neurosis presents an individual with a train of cardiovascular complaints resultant from deep rooted emotional disturbances. It is during the period of adolescence, when there is a titanic struggle for sexual adjustment, that the seeds for this neurosis is planted. The therapy is involved, and calls for deep psychoanalysis by a trained psychiatrist.

The *adult form* of cardiac neurosis has its source in a less involved conflict than the adolescent form, and is simply the product of emotional maladjustment to the day by day problems of the individual. The therapeutic approach is relatively simple, and can be extremely successful in the hands of any interested physician.

The *psychosomatic* form of cardiac neurosis represents the anxiety reaction which is the common accompaniment of most cardiac conditions. Much of this anxiety can be ameliorated by surrounding the cardiac patient with a human environment that radiates calm and reassurance. The eventual recovery of patients with cardiac accidents depends in no small measure upon the ability of the physician to eliminate the patient's prevailing panic.

420 Lincoln Road

SAMUEL BARD, M. D. (1742-1821)

HERMAN GOODMAN, M. D.
New York City

Samuel Bard was responsible for the first public hospital in New York. He was a pioneer in forming the first library, the first medical school. Doctor Bard was the instigator of the Botanical Gardens, land becoming Radio City through devious paths. He inherited Hyde Park and sponsored agricultural and horticultural experimentation, thus causing the foundation of the Medical Society of Dutchess County. Bard contributed the land for the Hyde Park Church and was a lay reader and senior warden.

Upon his retirement, Dr. Isaac Roosevelt left Dr. Hosack, associate and successor to Samuel Bard, and lived on his estate north of Hyde Park. He too became a senior warden and a century later another Roosevelt occupied the same post. The life of Samuel Bard would make a wonderful moving picture for he knew the men of pre-Revolutionary War and post-Revolutionary War fame. As the house physician to George Washington, he operated upon the Father of His Country.

Nearly all names of streets, neighborhoods and parks of old New York City reflect the acquaintances of Sam Bard. His home life was remarkable for he married his cousin, his childhood sweetheart. They died within a few hours of each other.

Sam Bard was one of the Americans, legion in number, better known to his own generation than to later ones. Recently his name has been mentioned in the public press through a farm project at Hyde Park. However, few paused to ask, "Who was Sam Bard?". Fewer sought and found biographic sources.

Briefly speaking, Samuel Bard was born April 1, 1742 in Philadelphia. To just say he was of French ancestry would cut short a family tree worthy of fuller mention. One great grandfather of Sam Bard was Peter Fauconnier, (1659-1746) secretary to Edward Hyde, (1661-1723) Viscount Cornbury, Governor of New York under Queen Anne (1665-1714). Through some miscalculation, about 6000 acres of land in Dutchess County above Poughkeepsie on the Hudson River were found surplus over 4,000 acres purchased from the Indians by Henry Pawling. In 1705, the Governor granted his secretary one fifth of these acres about Crum Elbow.

The Bard family were French Protestants. Pierre Bard, (1679-1734) born in France was sent by an uncle to Philadelphia when 26 years old. He married into a Quaker family and resided in Bristol, Bucks County, Pennsylvania. He was in business with Peter Fauconnier, receiver general of New Jersey. John Bard, (1716-1799) son of Pierre, became a physician under John Kearsley, (1684-1772) kin by marriage to Fauconnier. The young physician, who never went to a medical school or any college, became a friend of Benjamin Franklin, (1706-1790) ten years his senior. In time, Dr. John Bard married the granddaughter of Peter Fauconnier and settled in Philadelphia. In the fifth year of their marriage, Samuel Bard was born.

Benjamin Franklin influenced Dr. John Bard to seek fame and fortune in New York City through practice of medicine and purveying of medicinals. The newcomer to the city soon made his mark as citizen and physician. He read widely and wrote

on medical topics. He dreamt of founding a hospital, a medical college, and a medical library. He was responsible for the establishment of the first Pest House on Bedloe Island, site of the Statue of Liberty. He founded the first medical society to meet with any regularity in the New World.

Young Samuel studied at King's College planned in some measure by his grandfather and founded in part by a lottery, and grant of land by Trinity Church. He also attended his father's practice and sought to become a physician. At 19 years of age, he was sent abroad for scholarship and attainment of gentlemanly culture.

He became a prisoner of the French with whom the English were at war, but was released after five months through the good offices of Benjamin Franklin. He attended lectures at Edinburgh, which was then at the height of its glory as a medical training center. He was on medical services in wards of London hospitals; and received his degree and a prize for his essay on opium.

Sam Bard had received his first training in botany from his father. A gifted girl cousin had given the youthful Sam much botanical lore during his vacation upstate. In Edinburgh, botany was an important subject. Sam sent his father information for conduct of a botanical garden in the country. Hyde Park became an experimental station, as it were. Further, admiring the botanical gardens of the University, Sam Bard built in phantasy similar places for the proposed medical school of New York. Incidentally, the thesis on opium based on actual experiments on a roommate and on himself revised the theories accepted at the time, and proved opium was a sedative rather than a stimulant.

Sam Bard spent five years in study abroad. He would have remained longer for the Grand Tour, but finances at home and romance curtailed his stay. One year after partnership with his father in practice, Sam Bard had influenced King's College to institute a medical school. He was appointed professor of theory and practice of medicine. Sam Bard about this time, 1768, restrained his father's sale of the property at Hyde Park. The year 1769, marked the marriage of Sam Bard to his cousin; and the first steps for founding a hospital. The hospital was one of the requirements for medical education.

A few years later, the hospital plans were enlarged to include space for the care of lunatics. Further, Sam Bard increased his interest in the Society library, and organized a medical group. This was the year, he made his contribution to medical ethics, medical education and medical history—among the first in the country. Several years later, he wrote on angina suffocativa—our diphtheria—an American classic of first rank according to William Osler, (1849-1919). Bard also wrote a description of yellow fever.

This brings us to the time of the Declaration of Independence. John Bard and Sam Bard knew and were friends of many persons. We know some of them and others through street, neighborhood and park names of New York City. Let us list, and you recall where these are and revisit them. Barclay, Bayard, Beekman, Charlton, Clinton, Crosby, De Lancy, Duane, Franklin, Fulton, Gay, Hamilton, Henderson*, Hobart, Jay, Jefferson, Jones, King, Lafayette, Laight, Lewis, Lispenard, Livingston, Madison, Mercer, Montgomery, Moore, Morris, Murray, Pitt, Prince**, Putnam, Quincy, Rivington, Roosevelt, Rutgers, Smith, Steuben, Tryon, van Courtlandt, Vesey, Varick, Washington, Watts, Webster, White, and so on. These were the names of the great of that time. Later a suggestion is made to commemorate the lives of Bard and his successor, Hosack. It is necessary to recall a few figures. The population of New York about the time of the Revolution was 12,000; a decade later, New York numbered some 30,000.

The War of the Revolution found Dr. Samuel Bard in New York City identified neither with the loyalists nor the colonials. His practice was resumed after a short interval; King's College became Columbia; New York was the capital of the new nation (some say because John Bard gave it a good reputation as a healthful place); and Sam Bard became house physician to George Washington, (1732-1799). Sam and John Bard operated on the Father of His Country, 1789. Dr. Sam Bard became dean of the faculty of the reorganized College of Physicians and Surgeons, and continued to be active in botanical studies. He accepted responsibility for clinical teaching at the bedside in the new hospital; continued to accept appointments to enhance the place of the medical practitioner. Yellow fever carried off three of his children in 1783. He deferred retirement to Hyde Park because of a new epidemic of the dreaded disease in 1798. The doctor felt he could not desert his people and remained for duty amidst the horrors he knew so well. He became a victim as did so many others, but he survived, saved by the heroic behavior of his wife.

Ultimately Sam Bard retired or rather went into semi-retirement. He continued to see patients at and near Hyde Park. He was consultant to the physicians of the entire neighborhood. He founded the Medical Society of Dutchess County and became its president. He was active in societies for the advancement of agriculture and botany. He reorganized the new College of Physicians and Surgeons traveling to the city periodically to attend and conduct meetings. He wrote several texts. His compendium on midwifery went into five editions and was the most popular book on the subject. He contributed land for the Hyde Park Church, 1811. The next year, he bestowed the degree of Doctor of Medicine on Isaac Roosevelt, (1790-1863). After a decade with David Hosack, Dr. Isaac Roosevelt retired to Hyde Park. In due time, he followed Dr. Sam Bard as Senior Warden of this Church. Not

* **Few native or visiting New Yorkers know Henderson Place, a blind alley running north from 86th Street, east of Carl Schurz Park.**

** L. B. Prince, onetime Governor of the Territory of New Mexico, Author of Concise History of New Mexico (1912) and Churches of New Mexico (1915) exhibited the Prince Mansion at Flushing, N. Y. to my late father early in this century. Mrs. Prince often related tales of old Flushing, and was proud to have been active in furnishing the van Courtlandt mansion, especially the kitchen, with relics of the Flushing home.

so long ago, a grandson of Isaac Roosevelt occupied the same post.

Dr. David Hosack (1769-1835) deserves a biographical sketch all his own. He was chosen office associate and successor by Dr. Sam Bard who entrusted his patients and his botanical garden projects to him. In 1801, David Hosack, because of failure to arouse public interest in the matter, purchased on his own account the "common lands" where the road to Boston via Kingsbridge branched off eastward from the Bloomingdale Road. Did you recognize this plot as the land now bounded by 47 to 51 Streets and Fifth Avenue to Sixth? Only in those days, it was Middle Road and some three to four miles from the college buildings at Pearl Street! This plot cost the worthy doctor some one hundred thousand of those 1800 period dollars. David Hosack was the physician in attendance at the duel between Aaron Burr (1756-1836) and Alexander Hamilton (1757-1804). Later, he paid the cost of the trip to Europe of the discredited Burr. After many rebuffs, the New York State Legislature egged on by Sam Bard voted a public lottery to raise some $75,000 for the purchase of the botanical gardens from Dr. Hosack. They were given to the medical colleges of New York, soon to be fused into the College of Physicians and Surgeons. Sam Bard was elected president and the college accepted responsibility for the botanical gardens. After the War of 1812, financial support of the gardens passed more or less to the College. Sale of part of the property enabled it to assume University stature. The remainder came to be worth in millions what it had been worth in thousands a century earlier.

Sam Bard lived the even tenure of his ways. His son William Bard (1778-1853) studied law, was much interested in commerce and founded the New York Life Insurance and Trust Co., which he headed from 1830 to 1837. Dr. Sam became a lay reader or preacher for his Hyde Park Church. He continued his vast interests in the cultural life of New York City. His roots in Philadelphia gave rise to influence of some of its citizens in the New York Botanical Gardens. The New York Historical Society owes him a debt of gratitude. The Union Theological Seminary was one of his projects. All in all, Samuel Bard was a man! He lived life as he wished. He died a few scant hours after his wife, May 24, 1821.

A Bard Hall exists at the medical school of Columbia University. There is also a Bard Professorship of medicine at Columbia. Bard College was formerly St. Stephen's College founded by John Bard (1819-1899) but now attached to Columbia University.

A proposal is made here and now to name one section of the private street of Radio City, Bard Walk; and another section, Hosack Walk. At least once each year, when this thoroughfare is closed to the public, the names of Bard and Hosack will be given in the newspapers and over the radio. The event will be televised. Millions, yes, hundreds of millions will come to know the names of Bard and Hosack. The curious will seek and will learn why these names are given. Truly, both these great gentlemen deserve this honor.

18 East 89 Street.

DR. HYMAN I. GOLDSTEIN ON HIS 60th BIRTHDAY ON NOV. 2, 1947

SOLOMON R. KAGAN, M. D.
Roxbury, Mass.

Dr. Hyman I. Goldstein, born in Baltimore, Maryland, November 2, 1887, was graduated at Pennsylvania University Medical School in 1909, and did postgraduate work in Vienna in 1929, 1931 and 1932. He received a "Zeugnis" from the Medical Faculty of the University of Vienna in December 1929. He has been a member of many medical societies here and abroad, and has been a member of the editorial board of *The Review of Gastroenterology,* New York, since 1934. He made a number of visits to the large clinics and hospitals in Budapest, Vienna, Prague, Rome, Paris, Berlin and London during 1929-1937.

Doctor Goldstein was president of the Northern Medical Association of Philadelphia in 1939, president of the New Jersey Gastroenterological Society in 1940, and chairman of Section on Gastroenterology at the Medical Society of New Jersey in 1941. He has practiced medicine, medical diagnosis, gastroenterology, etc. in Camden, New Jersey, since 1909.

Doctor Goldstein has contributed nearly 125 original articles to medical literature, including papers on medical history. He investigated diphtheria, scarlet fever, endocarditis, meningitis (New York and Medical Journal, 1919), nephritis (*ibid,* 1920), influenza and epidemic pneumonia (*ibid.,* 1919), heart irregularities and the electrocardiograph, primary sarcoma of the gastro-intestinal tract, meralgia parasthenica, primary sarcoma of the liver (*Internat. Clinics,* 1921), primary malignant tumors of the adrenals, tumors of the heart, Paget's diseases of the bones, pneumococcus meningitis and endocarditis (*Internat. Clinics,* 1927), ulcer and cancer of the stomach in the middle ages, primary nodular cancer of the pancreas, and many other topics. Dr. Goldstein's heredo-familial angiomatosis, Goldstein's hemoptosis and Goldstein's hematemesis. He assisted in the revision of the third edition of Anders and Boston's *Medical Diagnosis* (1925), and the doctor participated in a number of international medical congresses held in Europe.

I join his numerous friends and colleagues in wishing him good health and many years of creative work in his chosen field.

176 Seaver St.

Editorials

Penicillin Therapy For Syphilitic Pregnant Females

In *New York Medicine* (the official organ of the County Medical Society), there was an excellent article recently by Dr. Mortimer D. Speiser who is connected with the Department of Obstetrics and Gynecology, New York University College of Medicine, Third Surgical Division (New York University) Bellevue Hospital. This makes the subject discussed authoritative.

Older practitioners were persuaded that syphilitic mothers seldom gave birth to uninfected babies. In fact when suspicion was directed toward a "blood disease", one of the first questions was: How many miscarriages have you had? The thought behind this was that Nature tries not to reproduce in the presence of syphilis. We now know that this was only a half truth; that many babies were born with congenital syphilis, and that the diagnosis was not always made if the clinician had no knowledge of syphilis in the mother. We did not have "tests" in those days, and a suspected chancre was "sacred territory" until the rash appeared from which a certain diagnosis could be made.

How different is the whole set-up since Ehrlich, Wasserman and many others helped to found serology upon a practical, daily, working basis! Mercury, the arsenicals and the iodides were virtually the only antisyphilitic remedies, and, while they were extremely helpful, they sometimes left in their wake a broken-down physical body which laid the way open to early and wasting diseases of the vital organs: heart, liver, kidneys, etc. The great discovery and therapeutic application of penicillin to human needs has revolutionized, not only the treatment of acute infectious diseases, but has helped to bring venereal diseases under control quickly and safely.

Dr. Speiser has outlined "an ideal plan for antisyphilitic therapy during pregnancy". Any agent used should be free from toxic reaction, should *cure* the maternal disease, should bring about recovery during a short period of time, should prevent the passing of syphilis from mother to baby, and, finally, should effect a cure while the fetus is still in utero. Penicillin fulfills these requirements better than any other remedy reported hitherto.

A "large number" of patients have been treated with penicillin, but only 287 here reported have been sufficiently followed so that conclusions can be fairly drawn. Of the 287, 233 had "infectious" (active) syphilis; while 54 had latent syphilis. Wherever possible two serological tests were made: one, a titered complement fixation test; the other a Kahn test carried out in serial dilutions.

In contrast to reactions after arsenicals, penicillin shows little or nothing save urticaria. Many investigators have observed unfavorable reactions with the arsenicals, such as nausea and vomiting, even deafness and blindness. The latter were especially prevalent in the early days of "606". To be sure some workers have reported uterine contractions after penicillin which resulted in abortion or premature delivery. The explanation is "a sort of therapeutic shock". It was found that this could be avoided by keeping the early dosage down during the first 48 hours, then increasing it to normal requirements later. In 156 prenatal patients thus managed, a careful study showed that not a single instance of abortion or premature labor was encountered. Of 177 patients who received penicillin *during pregnancy,* 19 early or late abortions, or premature deliveries occurred,—an incidence of 10.7 percent. Goodwin and Moore claim that this incidence is less than may normally be expected as an "accident of pregnancy".

The lowest dosage of penicillin at Bellevue was 600,000 units, 10,000 units every three hours for 60 doses. Subsequently, this dosage was increased, and in some instances arsenoxide was added. The fact that penicillin can penetrate through the placenta into the fetus has been amply proven, and it is assumed that enough can get through to be curative for the fetus, since at delivery no obvious signs of syphilis could be found.

Certain relapses or failures should be mentioned. But the question of re-infection from male consort rather than "relapse" should be considered. Three of 26 relapses or reinfections came on prior to pregnancy and 23 during pregnancy.

One is said to have "relapsed" twice during the same pregnancy! But re-treatment was highly satisfactory, and no congenital syphilis was found later in the newborn.

Dr. Speiser concludes that penicillin is the most satisfactory agent yet tried in the prevention of congenital syphilis. A dosage of less than 2,400,000 units alone is not advised at Bellevue. The rule is to use 40,000 units every three hours for 100 doses. During later pregnancies, re-treatment may be quite unnecessary if previous responses were satisfactory, and if the patient has been under complete and full observation during an interval. This means that a

prenatal patient must be studied at monthly intervals in order to detect any relapse, recurrence, or re-infection. Here, serological tests are imperative. Should re-treatment become necessary, a healthy offspring may be safely predicted. Even if penicillin therapy be started late in the pregnancy of a syphilitic woman, non-syphilitic babies may be expected in most cases.

As for latent syphilis, this is *uncured syphilis* concerning which predictions should be guarded. It is likely that some patients are in reality never cured, but that the parasites may lie dormant in unknown areas, in the deep tissues of the body, and yet may be re-invigorated or revived upon occasion. At least this theory has not yet been denied through positive proof. It is a safe, working hypothesis. In the greater view of the entire problem of syphilitic infection, we have come a long way, if not toward prevention, at least toward early diagnosis and effective treatment. In saving babies from the ravages of this horrible disease, we may feel that a wedge has been driven between the age-old companions,—civilization and syphilization.

Zoologists in War and Peace

At the meeting of the British Association for the Advancement of Science, which was held at Dundee, Scotland during the last week of August, science generally including medical science was discussed and reviewed by authorities on their several subjects. It may be pointed out that in 1947 two important jubilees have been celebrated, one technological and the other scientific. The papers or addresses given at the meeting of the British Association were uniformly good and those dealing with medical matters especially so.

The presidential address by Dr. Edward Hindle to Section D (Zoology) gave an account of some of the work in which zoologists had been engaged during the war. He gave a short description of the application of the principles of animal coloration known as camouflage. Special attention was paid to the efforts of zoologists to maintain food supplies without which, in his opinion, it was very doubtful if the country could have been fed adequately. The protection of food stocks against animal pests was an important part of the work, and reference was made to the work of the Bureau of Animal Population at Oxford on rodent control and to the development of the Infestation Division of the British Ministry of Food. During the war numerous attempts were made to increase the food supplies. Among these was included an extending of the use of an unmolestable fish which in the English Channel alone resulted in the production of about 1½ tons a week of excellent fish paste from fish formerly wasted. In some branches of operational research zoologists took a leading part.

A reference was made to some of the peacetime activities, especially to the work of entomologists in checking the serious losses in agricultural products, stored products and in the prevention of disease. For example, the loss of grain in India, due to rodents, insects and moulds, has been estimated to amount to 12 to 15 percent and a saving of 6 percent would be sufficient to prevent a famine. In Africa, the British Colonial Development Scheme, involving the spending of some £24,000,000 ($130,000,000) in the production of ground nuts would mean the use of mechanized agriculture on an unprecedented scale in that continent, and would probably create conditions favorable to the spread of animal pests and disease. Dr. Hindle wisely expressed the hope that a number of professional biologists employed in this project would be commensurate with this expenditure. In advocating any such scheme in a tropical country where insect life is rife, measures must be taken to control as far as is possible the inroads of the insect tribes, especially of those responsible for the spread of malaria. The mosquito is the host of the offending parasite and the tsetse fly the transmitter of trypanosomiasis.

Until these are effectively controlled a big undertaking such as noted will be very difficult to maintain. Malaria can be controlled no doubt at great expense but control of the tsetse fly is another matter. However, it is not so widespread as malaria and means no doubt will be found to attack this most dangerous of tropical African insects successfully.

Dr. Hindle said that an Empire Biological Service, somewhat analagous to the Fish and Wild Life Service in the United States had been suggested, as it was thought that this might offer the possibility of establishing a pool of taxonomic specialists who could be attached not only to national and provincial Museums in Britain but also to corresponding institutions in the British Empire. Ultimately this plan might be extended on an international basis.

Certainly malaria could be scotched if money and brains were employed unstintedly for that purpose and means for the abolition or control of the menacing tsetse fly would come to pass if measures of a like nature were practiced without regard to cost. While money is the root of all evil, used wisely it can be of untold benefit to mankind.

The Adaptability of Man

At the recent meeting of the British Association, Dundee, Scotland, in the Section J (Psychology), the question of the adaptability of man was the subject of Dr. S. J. E. Philpott's address.

Many of the problems handled by psychologists during the war have been concerned with this phenomenon. For instance, can a bank clerk be changed almost overnight into a tank gunner? Can he be changed back by a stroke of the pen? This question was answered in the affirmative in several instances in the course of the late war. A Major Fergusson, who served under General Wingate in a campaign against the Japanese in the Far East, or rather followed Wingate's plan of getting behind the Japanese lines, wrote of some of his experiences.

He described the first tentative effort of this kind which although not successful gave those of the various companies rigorous experiences dealing with jungle warfare, crossing rivers, and climbing mountains in tropical heat. Several of his officers and soldiers, civilians from British cities, were for the most part very adaptable concerning their duties as soldiers and their capacity for endurance. Other company commanders formed like opinions of most of their civilian troops.

However, this is a digression and reverting to Dr. Philpott's address, he said that in practice such transformations can take place with surprising ease, especially if the will to act be present, but there are limits. Broadly speaking, men are only adaptable within the outline of their all around ability, but granted the will and the aptitude men may play many parts.

It is the personal equation that counts and while training can increase skill, the physical and especially the mental ingredients must be present. Dr. Philpott illustrated that no matter how complex the result of the training may be, it still remains that all activities can be traced to the functioning of the one general purposes body-mind instrument.

The speaker said that before advising training we recently have been applying tests of potentiality. The naive view is that we ought to devise examinations capable of distinguishing between those born to be tank gunners and those born to be tank drivers. As proven, a one-time carpenter can often succeed at either of the two occupations. Granted that at the moment he doesn't know anything about either of them, do these tests have the power of selection?

Put briefly, although it is easy to devise tests of all-round ability (trainability or adaptability) it is quite another matter to discover tests that shall assess potentiality in respect of some one occupation and it alone. There is a wide overlap. Dr. Philpott is rightly skeptical of the value of tests, although he may somewhat underrate their use from the practical standpoint. It seems that man's adaptability has been proved times without number and just previously has been subjected to severe tests in the Wingate plan. Some men highly nervous will act with great courage when confronted with a desperate situation even though their background of living is devoid of suffering. Their inherent courage and capacity for disregarding and overcoming such physical obstacles automatically class them as supremely adaptable.

Again it may be insisted that Wingate's jungle war gave the men who took part excellent opportunities for displaying their capacity to adjust. They were in small bodies and often had to rely absolutely on themselves in order to survive. It was unfortunate that some of the most adaptable and most courageous lost their lives. On the other hand, the adaptability of many was demonstrated definitely.

Diabetes In Children

From time to time the New York Diabetes Association, Inc. issues information to physicians concerning its work. Number 29 of the series has been prepared by Dr. Alfred E. Fischer, New York City, for the Association. It contains certain fundamental concepts as well as guideposts which are of interest not only to the general practitioner, but to all who work in special fields as well, since it may just happen that a child diabetic goes to an opthalmologist or dermatologist, *et al* for the relief of "eye trouble" or "itchy skin" before consulting the "family physician."

Symptoms of a malfunctioning pancreas in children are not very different from those seen in adults, save that they begin more abruptly and are likely to be overlooked or misinterpreted because of *age*. If a child is continually running to the drinking fountain or another source of water supply, or if he has a spell of bedwetting after having been "housebroken" for some months, and if these are associated with constipation, one may suspect diabetes, or, at least, take a specimen of urine for analysis. To be sure, children often thirst during very active games such as basketball or baseball, but this is lessened at other times. Loss of weight, irritability, sweetish breath (acetone), and malaise after an acute illness, usually after some infection, are symptoms which need inspection.

Urinalysis, while useful, may not always tell the whole story, in which case blood sugar determination is in order. If diabetes is present a large amount of reducing substance will be found, but

it is not enough to know that sugar is present, we must determine the *type* of sugar, and glucose must be proven by fermentation. There are reducing substances other than glucose; for example, the pentoses, urates, glycuronates, and certain drugs may give a false impression. True renal glycosuria may simulate true diabetes, and large quantities of glucose may be found in the urine. However, loss of weight and overdrinking of fluids (water) are not common, and a blood sugar determination taken after meals usually runs a normal index of 60 to 120 mgs. percent. In the untreated diabetic child, one may find a rise to 500 mgs. percent, and the presence of ketone is concomitant evidence of carbohydrate upset.

The treatment of diabetes in children varies considerably from that in adults. First, every diabetic child requires insulin, while one may so "regulate the diet" in an adult as to make insulin giving unnecessary, at least for some months or years. The psychologic aspect in children is very important, and one must be careful not to plant an *idee fixe* wherein an inferiority complex bedevils the child from normal work and play. Four categories of management should be followed: 1. education; 2. diet; 3. insulin; 4. exercise.

As for the first, a combination of physician, parent, nurse, dietitian, and social worker is ideal, but cannot be worked in all cases. An older child may well be taken in as a partner in the enterprise, and the situation should be explained to him as fully as he may be able to understand the physiology of the situation. Everyone should know what diabetes is, and what it is not. Also the matter of management should be fully agreed upon and entered into completely and whole heartedly. Ultimately, responsibility must be shifted to parent and patient from the physician's shoulders.

As to diet, the cardinal principles are, to make food palatable and sufficient in calories for daily needs in the development of mind and body. One may be obliged to "juggle" with the state of nutrition so that changes may be made in the regimen from time to time. Between 2 and 4 years, the caloric need may be between 1400 and 1600. At 6 to 8 years, the requirement may be from 1800 to 2000, and at 12 years 2200 to 2500, running higher as occasion demands. Diet prescriptions are now more liberal than before and not so much stress is laid upon the chemical composition of foods. An adequate vitamin and mineral intake can be furnished through proper choice of foods, fresh fruits, salads, vegetables, so as to supply a "mixed diet." Rough rules may be set up so that in percentages, carbohydrates may furnish 45 percent of the needed calories, protein, 15 percent, and fat 40 percent.

By weighing foods at first, one may come to know the calories contained in the food portions consumed. A too-rapid gain in weight must be quickly checked, but hunger and no gain in weight call for more food. So-called "special diabetic foods" are not imperative, although they may be used as a matter of convenience. Candy, actual sugar from the jar, and sucrose in any form should not be too liberally allowed. It is well for everyone to exercise restraint in the quantity of sweets consumed. Certain foods are necessary for a child's development, such as milk, peas, beans, corn, whole grain cereals, salads and dairy products (eggs, cheese). There is danger in the term "free diet" since it would seem to imply everything from frankfurters to sundaes.

Meals can be regulated to 3 large and 2 or 3 smaller meals a day, but nothing after 8 at night, in order not to disturb sleep until 7 a.m. or later.

Use of insulin requires good judgment. Very young children do well with a dose of crystalline insulin before breakfast and before dinner. Small doses are best since addition of a single unnecessary unit may bring on hypoglycemia. The most dilute solution of insulin purchasable is U-20. It should be injected with a long-barreled syringe. Irritability or pallor coming on 4 to 5 hours after injection usually means hypoglycemia. There may be also nightmare, bewilderment and unconsciousness. A glucose-free diet is hard to obtain and is not absolutely necessary. There is no way to determine the actual amount of insulin required, but small doses used with caution will help in gauging the quantity.

All diabetics require exercise in order to burn up food intake which nature is trying to assimilate. In summer, with active outdoor exercise, more carbohydrates can be allowed than in winter when the child sits in school much of the day.

Insulin reactions are to be avoided. They frighten the child and may cause him to resent any further injections. Proteins and fats are to be reduced as in any acute illness. In excessive glycosuria, increased insulin is the rule. The prognosis for a well-managed diabetic child is good to adult life. Then one must watch for degenerative lesions which may come on as a result of chronic functional impairment.

MEDICAL ESSAY

Medical Humanism

B. LIBER
New York

The resiliency of the French people, particularly in intellectual and esthetic matters, is marvelous. Their need of culture is so great that after the most destructive war, at the time of the deepest economic crisis and in face of a paper shortage, they have managed to issue a flood of books on science and literature, have started the publication of their old periodicals again, and also have printed a multitude of new ones.

The medical press is just as rich now as it was before the war.

The *Presse Médicale*, the foremost French medical journal whose American correspondent this writer has the honor to be, appears now regularly, weekly, and it promises to come out twice a week as in normal times. In addition to its usual splendid material, it carries new and interesting features. There are supplements with especially fine illustrations, sometimes colored, or meticulous photographic Roentgen reproductions. Other numbers have departments entirely devoted to practical therapy of common diseases, written for the benefit of the general practitioner. Again the purpose of still other special numbers is to bring to the reader complete lists of medical articles published during the month in various journals throughout the world and classified according to the various specialties, with abbreviated but clear and useful contents.

But the most amazing and the most beautiful and unique among the newer magazines for doctors is the large and elegantly printed book called *Connaitre* (To Know), appearing five times a year. It is a work of love and art or, at least, of rare craft, and a wonderful journalistic job both in form and contents done by people with refined taste who are extraordinarily well posted in their subjects. Its sub-title is "Medical Humanism" and its aim is to explore and bring to the profession all the questions related to medicine—which means almost everything. Under the able editorship of Doctors E. and H. Biancani, each issue is a symposium of one topic principally.

"Education and Medicine" deals in upbringing and schooling with the child's physical and psychic development; the temperaments; the troubles of character; the affective disturbances of children; the deficiencies of the intellect as a social problem; the pedagogic methods.

"Labor and Medicine" is interested in industry from a wider point of view than mere industrial hygiene; in the sociology of work; in woman's contribution; in the joy of toil.

In "Biological Problems" we read about the evolution of the conception of life; a psychosomatic comparison between rural and city people; a study of psychism and existentialism.

There is the section "Masses, Elites and Medicine" with its interesting article on "Education of the Masses". Then there is "The Family, the Nations and Medicine", with considerations on "Social Biology", "Heredity", "Migration", and so forth.

Each book contains also gems of general science, philosophy, anthropology, archeology, entomology, the great outdoors, the current art exhibitions and articles on art in general; reviews of the latest theatrical shows, cinemas, literary productions, musical compositions and abstracts of the best papers in the magazines for the most select readers.

The contributors are among the glories of the country, each one a giant in his own field. No article is written in the superficial journalistic manner, which only tries to attract the reader in the first condensed paragraph and is careful not to burden him with a too heavy or too substantial nourishment.

The French physician, following an ancient tradition, has always been an idealist, a man of culture, interested in all phases of life, in science as a whole, in literature and the arts. Also in social matters and in politics, in the best sense of these words. More doctors have figured in the first ranks of the revolutions with which France is so rich, than in any other country. Many have sacrificed their lives on the altar of what they believed was right. A much greater proportion of them than elsewhere have been elected as representatives and legislators, usually on the progressive side. Some of them have been illustrious statesmen and have had high governmental positions and probably hundreds are the mayors of the towns where they practice. They have given to their country and to the world splendid leaders, fine teachers, luminous writers.

Would a periodical publication like "Connaitre" be possible in our American medical reading public? Are there among our hundred and fifty thousand doctors a few thousand thirsting for medical and associated humanism?

Was it not an American physician who coined the saying: "If you know medicine only you do not know medicine".

65 West 95th Street

Wisconsin Forms Rheumatism Association

The Wisconsin Rheumatism Association was formed recently by physicians from various parts of the state, whose objects are; to cooperate with the American Rheumatism Association; to sponsor and assist in a state program for the prevention of the disease and for improved care and rehabilitation of stricken patients; to promote the education of physicians; to accumulate data on the rheumatic diseases, and to receive and expend money to foster the purposes of the association.

News Items

Yale Institutes Oncology Section.—The importance of applying experimental advances in cancer to persons suffering from the disease was recognized by the Yale School of Medicine with the subsequent establishment of a special section in its department of surgery dealing with oncology. Professor Samuel C. Harvey, having retired from the William H. Carmalt Professorship of Surgery, and the chairmanship of the department of surgery, has become Yale's first professor of surgery with special reference to oncology,

It is believed that with this responsibility centered in one person, activities in the field of cancer will be stimulated and become more closely associated.

Dr. Harvey's new chair in surgery is supported by grants from the National Cancer Institute of the U. S. Public Health Service and Mr. Robert E. Hunter, of Pasadena, Calif.

Hospital Administration Courses Offered.—The Army Medical Department has inaugerated its first class in hospital administration last month at the Medical Field Service School, Brooke Army Medical Center, Fort Sam Houston, Tex.

The object of the school is to qualify officers of the Medical department to function efficiently in administrative positions within the Army hospital system. The 12 week session caters to officers of the Medical Service Corps, Regular Army, who have completed five years active commissioned service as of November 1, or Army Nurse Corps, Regular Army, who must have completed five years administrative experience as of November 1, in the capacity of chief nurse or assistant chief nurse in an Army hospital. Similar courses are to be repeated in the future.

Congress of Microbiologists Attended by Major Carlquist.— Major P. R. Carlquist, PC, chief of the department of bacteriology in the medical division of the Army Medical Department Research and Graduate school, attended the Fourth International Congress of Microbiologists held in Copenhagen, Denmark.

Hawley Recipient of Gorgas Medal.—For outstanding achievement in reorganizing and directing the Veterans Administration Medical Division, Major General Paul R. Hawley has been awarded the Gorgas Medal extended by the Association of Military Surgeons of the U. S. and sponsored by Wyeth Incorporated, Philadelphia pharmaceutical house.

Among the accomplishments made under General Hawley's administration can be recorded the removal of Veterans Administration physicians and nurses from Civil Service control and the establishment of a policy under which personnel, research services, and training of the large medical centers of the country have been made available to the Government hospitals. Of the Veterans Administration's 124 hospitals, more than half are affiliated with medical schools and are giving resident training to more than 2,000 doctors.

Radio-Active Materials—New Field of Study.—Industrial toxicology is now centering major study on the use of radio-active materials in manufacturing, as reported by Dr. A. G. Cranch, director of the Toxicological Department of Union Carbide & Carbon Corporation in *Health on the Job.*

"The industrial toxicologist formerly had few problems," Dr. Cranch said. "Until the advent of the synthetic chemicals, he was concerned primarily with the study of a few solvents, dust hazards, and the toxic properties of some metals. Following synthetic chemicals came plastics, and now he is concerned with the use of radio-active materials. Immense precautions are necessary in all research problems because the field is practically unexplored."

Pan American Congress To Meet in January.—The Third Pan American Congress on Ophthalmology will meet at Havana, January 4 to 11, to which the governments of all Pan American countries have been officially invited by the government of Cuba. There will be an exhibit of amateur art by ophthalmologists, and on the lighter side of the meeting is the "Pan American evening", in which guests will wear typical regional dress.

Industrial Medicine Program Scheduled for West Coast.—It is reported in *The Bulletin of The Los Angeles County Medical Association,* that for the first time on the West Coast, industry has requested the medical profession to present a program on Industrial Medicine. In compliance with this wish, a one day institute was held at the Riviera Country Club, November 18. It was under the auspices of the Section on Industrial Medicine and Surgery of the Los Angeles County Medical Association, and the subject matter included historical survey, economic considerations, details of medical administration, and duties of the medical department, in addition to a host of other interesting speech material.

New Member for Yankee Network Institute Series.— The Massachusetts General hospital has joined four sister hospitals in presenting "Medical Center of the Air" programs over WNAC and the Yankee Network, under the auspices of the Yankee Network Institute.

These programs are aired weekly in New England and are under the direction of James S. Powers, director of the Yankee Network Institute.

Potentialities of Air Sanitation Discussed.— The pros and cons of air sanitation in the control of a wide variety of respiratory and infectious diseases appear to be great but concrete results have not yet materialized, according to Dr. Alexander Langmuir, associate professor of epidemiology, John Hopkins University.

Doctor Langmuir underscored the great revival of interest in the concept of airborne infection and the numerous mechanical devices which have been developed for air disinfection. He expressed the conviction, as revealed in *Health News,* that these engineering techniques can be used effectively only with accurate knowledge of the mode of transmission of the diseases against which they are directed.

Pasteurization Upheld in Georgia.—A current news release from Georgia states that the Fulton County Superior Court held that the ordinance of the city of Atlanta providing that "no fluid milk shall be sold to the ultimate consumer except grade A pasteurized or certified milk pasteurized" is not oppressive, burdensome, arbitrary and unreasonable or unconstitutional, in a case which came before the court during the summer. The case was not appealed to a higher court . . . according to *Jour. Amer. Med. Assn.* Nov. 1.

General Bliss Reports on German Medicine.— In his recent inspection of American military medical installations beyond the Rhine, Major General Raymond W. Bliss, surgeon general of the Army, reports that German medicine has fallen to an almost unbelievably low estate. The load of patients are on a constant increase with no adequate hospital or laboratory facilities available.

The possible solution to this drastic situation which is in the General's mind, is the setting up of a residency training program for young American Medical Corps officers now stationed in Germany. This program would give the army doctor a vast radius of possible illnesses to be treated for they would be exposed to the clinical material available in the German civilian hospital.

Paris—Scene of Biology Congress.— Paris played host to the first International Congress on Clinical Biology last month with Professor Polonovski as chairman and Professors Justin Bescancon and Fleury as vice chairmen. The session was devoted to reports on syphilis, anemias, new results of examination of the cerebrospinal fluid and new observations in gastric physiology and pathology. Also reports on methods of determination of hemoglobin, blood proteins, hepatic insufficiency and the dosage of hormones were on the agenda.

Egyptian Cholera Epidemic Studied by Schering Research Group.— Dr. Harry Seneca, research associate of New York's Columbia University, college of physicians and surgeons and consultant to Schering Corporation, Bloomfield and Union, N. J., recently flew to Cairo by special plane to study methods and assist in the control and treatment of epidemic cholera now prevalent in the Nile Valley.

Dr. Seneca reached Cairo at the peak of the epidemic when hundreds of natives were being stricken daily with this dread disease, which in its early epidemic stages is frequently found 90 percent fatal.

The possible development of an effective remedial and prophylactic treatment for cholera, will be of tremendous interest to medical and health authorities in the Mediterranean, Middle East and Far East areas where the disease is periodically epidemic.

Governors Urged to Alleviate Nurses Crisis.— In a recent appeal by Katharine J. Densford, president of the American Nurses' Association, governors of all 48 states were urged to call state-wide conferences "at the earliest possible date" to propose concrete measures which would resolve the nursing crisis created by increased demands for nursing service now facing the nation.

Miss Densford reported that the ANA, representing 155,000 professional registered nurses, received wholehearted support from the state association presidents on three major points of the current program: 1. Make nursing care equally available to all by intensifying efforts of the ANA's counseling and placement service for the best possible use of available nursing service, and have a continuous supply of nurses through promoting recruitment; 2. Improve conditions, rates of pay, personnel practices, have the nurses share in administration policies; 3. Protect the public by adequate legal control of nursing practice, both professional and practical.

Stassen Proposes Medical and Health Reforms.—In Mr. Harold E. Stassen's new book, "Where I Stand," just published by Doubleday and Co., N. Y., he reveals that "Every American now on Social Security rolls could be provided with insurance against hospital or medical expense in excess of $250 a year. Such a program would leave all the normal hospital and medical costs—those under $250 in a single year—to be handled as they are now—individually or through voluntary group insurance."

Also among the cited proposals he states the need for an "immediate survey of existing hospitals and medical services to locate serious gaps."

He also expresses his views on housing, taxes, labor, prices and small business.

Personals

Newly named professor of biochemistry and head of the department at the University of Illinois is *Dr. Otto A. Bessey.* At present he is chief of the division of nutrition and physiology at the Public Health Research Institute of New York City, and will assume his new duties March 1, 1948. Dr. Bessey is noted for his extensive research on the pathology of deficiency diseases.

Dr. Donald A. Covalt has resigned as chief of Veterans Administration physical medicine rehabilitation service to become associate professor of physical medicine and rehabilitation in the New York University School of Medicine and also head of NYU's new Rehabilitation Institute. *Dr. A. Ray Dawson* has been asked to succeed Dr. Covalt.

Appointment was recently confirmed of *Dr. Arden Freer,* Washington, D. C., to become deputy medical director of Veterans Administration. He succeeds *Dr. Robert C. Cook* who requested transfer to Colorado.

Dr. William A. Hunt, professor of clinical psychology, Northwestern University, Chicago, has accepted the assignment to be on the national advisory board on medical problems of the Veterans Administration.

Recently selected as chief medical consultant for Europe, is *Dr. Henry F. Helmholz,* chief of the section on Pediatrics at Mayo Clinic, plus being an authority on child care. Dr. Helmholz, who presided over the recent International Congress of Pediatrics in N. Y., has been granted a year's leave of absence by the Mayo Clinic in order to undertake this present mission.

In addition to his numeral duties will be his emphasis on the control of venereal disease, diphtheria, and nutritional and deficiency diseases among children.

Dr. Herman E. Hilleboé, commissioner of health of the State of New York, has been appointed chairman of the New York State Food Commission. This newly created commission will cooperate closely with all state departments, especially the Departments of Health, Agriculture and Markets, and Education. The two fundamental objects of the program are to save New York's share of grain to prevent starvation in Europe, and to achieve and maintain at the same time health, vigor and morale for all.

Executive secretary of the State Committee on Tuberculosis and Public Health of the State Charities Aid Association, N. Y., *George J. Nelbach* recently retired. He was a pioneer, with forty years of service to his credit in serving in antituberculosis campaigns.

The new assistant commissioner for medical administration is *Dr. Morton L. Levin.* Doctor Levin was director of the N. Y. Department's Division of Cancer Control. He succeeds *Dr. Edward S. Rogers* who resigned last year to become Dean of the School of Public Health, University of California.

Dr. John F. Fulton, chairman of the department of physiology, Yale School of Medicine, internationally prominent as a biographer and also as an investigator in the field of aviation medicine, has gone to England to deliver five lectures at the London School of Hygiene and Tropical Medicine.

Dr. Fulton has been selected to give the Heath Clark Lectures on the general subject: "Aviation Medicine in its Preventive Aspects: An Historical Survey." This series is an endowment of the University of London.

Dr. James G. Miller, chief of the clinical psychology section of the neuro-psychiatric division of the Veterans Administration, Washington, D. C., has been appointed chairman of the department of psychology at the University of Chicago.

Dr. Elliott C. Cutler, Moseley Professor of Surgery at Harvard and surgeon-in-chief at the Peter Bent Brigham Hospital in Boston, died recently at his home. During World War II, Dr. Cutler was a Brigadier General in the Medical Department of the Army, serving as chief consultant in surgery and later Chief of Professional Services in the Office of the Chief Surgeon, European Theater of Operations. He was an honorary consultant to the Army Medical Library.

Dr. Paul R. Hawley, Chief Medical Director, Veterans Administration, has recently concluded an extensive inspection tour of Veterans Administration hospitals.

The recent retirement of *Dr. Edward McPherson Armstrong,* as a medical director of The Mutual Life Insurance Company of New York under the company's retirement plan, has been announced by Alexander E. Patterson, president of the firm.

Dr. James A. Paullin, professor of clinical medicine, Emory University, Atlanta, Georgia, and former president of the American Medical Association and American College of Physicians, was recently appointed to the Federal Hospital Council, established last year to assist Surgeon General Thomas Parran of the U. S. Public Health Service in the administration of the hospital survey and construction program.

Dr. William A. Feirer has been elected executive vice president of Sharp & Dohme, Inc., succeeding William L. Dempsey, who now becomes president of the corporation. Dr. Feirer, formerly vice president in charge of medical research, also was elected a director of the company.

Dr. Horace T. Gardner, an instructor in the section of preventive medicine at the Yale School of Medicine, has been assigned to an Army research laboratory in Germany to continue the joint Yale-Army investigations of infectious hepatitis. The appointment of Dr. Gardner was made jointly by Yale and the Virus and Rickettsial Disease Commission of the Army Epidemiological Board. During most of the year he will study in the U. S. Army Infectious Hepatitis Research Laboratory.

LETTER FROM BRITAIN

(From Our Own Correspondent)

Centenary of the Discovery of Chloroform Anaesthesia

On November 4, the University of Edinburgh celebrated the discovery of chloroform anaesthesia by Sir James Simpson in 1847. A scientific meeting which was held at 9:30 a. m. in the Surgery Department of the New Medical Buildings discussed the use of chloroform at the present time. Papers were read by Professor R. B. Mackintosh, Dr. D. S. Middleton and Dr. John Gillies.

Calm Before The Storm in The Medical World

It seems that great changes are impending in the medical world here. While politics are to be banned, or at least avoided as much as possible in a medical journal, when events appear to be about to happen in the near future which may affect profoundly the medical profession, to avoid referring to them would be inexpedient. Sir Ernest Graham Little, M. P. for London University in addressing students of the Royal Dental Hospital in London on October 11 said in part that, "If I were a young professional man enjoying good health and having had an adequate training, I should certainly make effort to leave this country while the going is good".

He said that there was something of a lull "preceding the storm which must be expected to break in the coming months." He described the National Services Act, 1946, as a glaring example of the totalitarian hand of present British legislation in its magnification of the power of the executive and in the consequent curtailment of individual freedom.

In the opinion of the speaker, one of the most mischievous features of the act was the denial of appeal to the courts when a doctor was dismissed from the State Service. No appeal except to the Minister was allowed beyond the tribunal which replaced the General Medical Council in the function of dismissing a doctor. A man disqualified in the British State Service would be unable to practise in Britain.

Of course, this is one side of the situation as regards the practise of medicine here and there are many medical men who are in agreement with the regulations laid down in the Act. The feature which many oppose is the loss of freedom and the curtailment of most of the power hitherto vested in the medical rulers of the medical profession. They hold that in the past the British medical profession has served the country well and believe that, at any rate, in matters fundamentally medical those at the head have directed the policy of the profession ably and honestly and think that to take all direction out of their hands to give to persons who are admittedly ignorant of medical practise, except from the standpoint of the laymen, is a step in the dark. However, at present the British medical men if not exactly pursuing the even tenor of their way are going along much the same as formerly and await the future with feelings based largely on their different views of an unexpected situation.

Second Attacks of Poliomyelitis

The view held by many, if not most, medical practitioners here is that second attacks of this disease do not occur. That is sufferers from one attack are immune from another manifestation of the same disease. It appears that this view is wrong and that although a recurrence is very rare, that it has occurred on several occasions. This question is discussed at some length in the *Lancet*, October 11 and it was pointed out that considering the cases of second attacks which had occurred and published there was evidence to show that while extremely uncommon, it had been proved that immunity was not necessarily conferred by one attack.

Investigating Infantile Paralysis

Problems besetting those who investigate infantile paralysis were outlined in a recent lecture by Professor H. J. Seddon at the Royal Institute of Public Health and Hygiene, London. He stated that one of the great handicaps in research was the complete absence of any simple diagnostic test for the presence of the virus or of the disease itself.

Epidemics of the disease have a remarkable seasonal incidence. They generally occur in the late summer and early autumn, at the time when fresh fruit and vegetables are consumed in the greatest quantity, yet it has not been possible to demonstrate any definite connection between this seasonal change in diet and the incidence of the disease. Malnutrition did not appear to be a predisposing factor. Professor Seddon said that as yet there was no specific means of protection but that there were two important general preventive measures, the avoidance of physical strain and of overcrowding.

Old Age Welfare

In the Report of the London County Council for the year 1946-47 published recently is an account of the expansion of the Old People's Welfare Department. An experimental London Federation of Homes for the Aged has been established for the purpose of raising the standard of homes for the aged and for providing a consultation service. The Federation is planning a conference for matrons of old persons' homes. The London Council has investigated home help available for the old in the various metropolitan boroughs and local committees are providing mobile meal services and canteens.

Week End Courses on Chronic Rheumatic Diseases for Medical Men

On October 25, Lord Moran, president of Royal College of Physicians opened at St. Stephens Hospital, London County Council, Fulham Road, London, S. W. 10, a week-end course for general practitioners and demobilised medical officers.

Book Reviews

Gastro-enterology

The Diagnosis and Treatment of Diarrheal Diseases. By WILLIAM Z. FRADKIN, A. B., M. D., assistant attending gastroenterologist, Jewish Hospital of Brooklyn; physician-in-charge of Colitis Clinic, Department of Gastroenterology; associate bacteriologist, Colitis Division, Department of Laboratories; Jewish Hospital of Brooklyn, N. Y. Illustrated. New York, N. Y.: Grune and Stratton, Inc., 1947. Pp. xiv + 254. Price $6.00.

Diarrheal diseases, their regulation and treatment have become of increasing importance and significance to the medical profession and particularly to the specialist. A generation ago ulcerative colitis was regarded as a rare case, regional ileitis was undescribed, salmonella infections little understood. Even the common psychogenic diarrhea, the cases of "irritable colon," were confused and misnamed, such as mucous colitis, a condition which never should have been regarded as an inflammation in any sense of the word.

The late war has emphasized the need for the appreciation of the greatly increased incidence of diarrheal manifestations in the armed forces and in civilian life. The development of the concept of psychosomatic medicine in its application to diarrheas and particularly to ulcerative colitis has greatly enlarged the scope and relationship of psychic factors to ulcerative colitis, to ileitis and to functional diarrheas. The necessity for the early recognition of parasitic carriers and of diarrheas of clinical significance caused by parasites is also a development of increasing significance.

This book attempts to crystallize in a short practical presentation, the various laboratory and clinical aspects, the diagnostic problems and the therapeutic results of this broad field of gastro-enterology. The pertinent laboratory investigations, the roentgenologic studies, the accepted therapeutic measures have all been simply described. The section on *Diarrheas of Infants and Children,* is not covered adequately. Disorders associated with starch and fat intolerance should have been treated as separate entities and not included in the celiac syndrome. Diarrheal disorders associated with acute and chronic disorders are omitted entirely. Nevertheless, the book gives first-hand orientation of this major symptom in everyday practice.

Speech in Focus

Visible Speech. By RALPH K. POTTER, Director of Transmission Research, Bell Telephone Laboratories; GEORGE A. KOPP, associate professor of Speech, College of Literature, Arts, and Sciences, University of Michigan; HARRIET C. GREEN, assistant professor of Special Education, Michigan State Normal College. Illustrated. New York, N. Y.: D. Van Nostrand Co., Inc., 1947. Pp xvi + 441. Price $4.75.

Anyone who has seen moving pictures of the vocal cords, a film brought out by the Telephone Company some years ago for educational purposes, need not be surprised that further research has encouraged the photographing of the sound tracks made on the charts. We can now "see speech" as well as hear it. More than 500 reproductions of spectograms show all the important sounds in American speech, and there are phrases and sentences as well as words in the set-up. Part I discloses the results of experimental training both of the normal and deafened, and describes the techniques of procedures. Part II explains how visible speech may be read according to a new kind of alphabet. This includes the subject of phonetics. Part III takes up the uses to which this new medium may be put, such as language study, music, and physiological diagnosis. There is still much unexplored territory. This book is full of information concerning the structure and characteristics of many kinds of sound, much of which has been acquired through a study of electronics. Anyone who is willing to memorize the distinctive symbols will be able to read "voice writing". It is almost bewildering to behold the rapid advances which communications of human beings with each other have reached. Perhaps these will help nations to "understand" each other because their component individuals do so. That may well remain a fervent hope.

Self-Diagnosis

Signs and Symptoms. Their Clinical Interpretation. By CYRIL MITCHELL MACBRYDE, M. D., F. A. C. P., assistant professor of Clinical Medicine, Washington University School of Medicine; assistant physician, Barnes Hospital, St. Louis, Mo. 74 illustrations in black and white and 12 subjects in color on 6 plates. Philadelphia, Pa.: J. B. Lippincott Co., 1947. Pp. xx + 439. Price $12.00.

How convenient it would be for the physician if the new patient were able to announce: "I have a gastro-intestinal disturbance," or, "my trouble is nephritis." A perusal of the usual textbooks of diagnosis or of medicine would lead one to believe this might be the case, for the chapters consider "infectious diseases," "intoxications," "deficiency diseases," "metabolic diseases," "respiratory diseases" and so on, in rigorous order, as though every sick person carried his presumptive diagnosis labeled on his chest. Where in such textbooks can the doctor seek help when the patient confronts him complaining, for example, of severe epigastric pain, or of headache, or of jaundice?

One must admit that monographic development of the complete picture of a disease is an important means of medical education, but there are serious defects in a system which encourages us to force the ailing person into a compartment, no matter how poorly it may fit him. It is widely recognized by experienced clinicians that a skillfully taken history, with a careful analysis of the chief complaints and of the course of the illness, will more frequently than not indicate the probable diagnosis, even before a physical examination is made or any laboratory tests are performed. A master diagnostician I know says: "Let me take the history and I will accept any good intern's word on the physical findings." In other words, even today the accomplished physician can learn more in the majority of cases from what his patient says, and the way he says it, than from any other avenue of inquiry. If one doubts this, let him remember that pain in one of its thousands of guises is by far the most common

presenting symptom. How handicapped we would be if the patient could not tell us that he had pain, or where it was, or its nature, or duration, or radiation!

A useful aid in the interpretation of symptoms consists in grouping them together to form quickly recognizable complexes or syndromes. Every medical student learns that "dermatitis, diarrhea and dementia" means pellagra, and that "tremor, tumor, and tachycardia" indicates hyperthyroidism. The veriest medical tyro knows that a chill, a pain in the chest and rusty sputum could hardly signify anything but pneumonia. Little medical rhymes, hallowed by word-of-mouth transmission to successive medical generations, honors ileus, "the symptom-complex known throughout the nation, characterized by pain, vomiting, tympanites and obstipation," and epilepsy, "the aura, the cry, the fall, the fits, the tonus, the clonus, the involuntary defecation." Indelibly stamped in many a physician's mind lies Charcot's, *Triad of Insular* (multiple or disseminated) sclerosis; intention tremor, nystagmus and scanning speech. Frequently, however, in the commonly recognized syndromes very little is understood as to the actual origin or mechanism of production of the primary symptoms and signs. Thus these tricks, these aids to memory, lull us into a false complacency, based too often upon very little real knowledge.

The physician today has many technics available to assist him in making accurate diagnoses. He can peer into the recesses of the body: bronchoscopy, gastroscopy, thoracoscopy, peritoneoscopy, cystoscopy. He can study the shadows cast by the body's parts upon the x-ray film; simple x-ray, laminography, kymography, cholectystography, encephalography, gastro-enterography, pyelography, bronchography; he can remove blood or lymph or abnormal fluid accumulations for physical and chemical analysis. He can remove bits of tissue from the surfaces or the cavities of the body and study them under the microscope and in the chemical and physiologic laboratory; the action potential, the very currents of life itself, he can record and analyze in the electroencephalogram and the electrocardiogram. However, without an understanding of the meaning of symptoms, how useless are these refined diagnostic technics! They are but tools which are only as valuable as the mind which directs them. The informed mind will understand the meaning of the specific type of mucosal defect seen through the bronchoscope in relation to the patient's symptoms of hemoptysis. The high icterus index observed in the laboratory study of a patient's serum has significance of one type if associated with recurrent attacks of right upper quadrant pain, but of another when found in association with a shrinking liver during pregnancy.

No mechanical measures can take the place of careful consideration of the patient's complaints. No device, be it ever so clever mechanically, electrically, or chemically, can serve as a substitute in the art of medicine for the informed mind of the physician. The physician's ability as a diagnostician will determine the nature and the efficacy of the treatment he chooses to employ. His ability to diagnose will depend in only a minor degree upon his ability to use special technical measures. He must know when to use them, which tests to select, and how to interpret the physical findings, as well as the special laboratory tests. The physician's judgment in these matters will depend largely upon the ability to analyze and interpret symptoms.

This book attempts, so far as present knowledge permits, to give the basis for analysis and interpretation of some of the commonest symptoms which bring patients to the physician. Emphasis is placed upon the pathologic physiology of the symptom, while its correlation with other symptoms and with physical and laboratory evidence is considered as important but secondary in the diagnostic method. Our knowledge concerning many of these symptoms is incomplete, but it is rapidly expanding. Although the final word often cannot be said, critical and analytical thinking in the manner followed in these chapters should prove productive for patient, practitioner, professor and student. The monograph is a clear-cut evaluation of common signs and symptoms invaluable in diagnosis.

Neurology

The Anatomy of the Nervous System. Its Development and Function. By STEPHEN WALTER RANSON, M. D., late professor of neurology and director of the neurological institute, Northwestern University Medical School, Chicago, Ill. Revised by SAM LILLARD CLARK, M. D., professor of anatomy, The Vanderbilt University School of Medicine, Nashville, Tenn. Eighth edition. With 417 illustrations, 14 in color. Philadelphia and London: W. B. Saunders Co., 1947. Pp. x + 532. Price $6.50.

The eighth edition of Ranson's "Anatomy of the Nervous System", has been revised by Clark, and, as in the previous editions, emphasis has been laid on the development and functional significance of nerve structure and on the interpretation of its normal and abnormal physiology in general in its relation to the rest of the living organism. In selecting the material for the early editions, the needs of the medical student were kept in mind by the authors. This has been continued in this revision and emphasis has been again placed on those phases of the subject which a student is most likely to find of value.

The text follows the anatomical divisions of the nervous system in the discussion as is usually done. Nevertheless, the order of presentation has been somewhat altered in this revision, as, for instance, in the sequence of material in gross descriptive anatomy (Chapter II). Chapters XX and XXI are new in part, but represent in part a rearrangement of old material. The chapter containing clinical illustrations is not exhaustive. A set of illustrations made from parasagittal sections has been introduced to aid in the visualization of the various structures of the brain stem in three dimensions.

As part of the revision, the results of many of the advances which have been made in neurology in the recent years are included. Concerning these, whenever the statements made differ from those found in other texts the authority is always cited.

The original author made free use of material gathered and arranged by others in the various

handbooks, texts, and atlases that deal with the nervous system. The classification of the different paths and centers adopted here is based on the works of Sherrington. The terms which he introduced and which are now coming into general use have been employed. In the analysis of the cranial nerves, the American conception of nerve components, as presented by Herrick, has been utilized. This is, naturally, continued here.

An outline for a laboratory course in neuro-anatomy has been included, and this has been so arranged as to be easily adapted to class use. "Autonomic" and related terms have been used for sympathetic and parasympathetic when referring to functional divisions of visceral innervation, leaving "sympathetic" to be used as a gross descriptive term. There is appended a very large and excellent bibliography.

The excellence of the former editions is well continued in the present one. The publishers have manufactured a physically attractive book, not the least part of which is the number of well made and well reproduced illustrations.

Nutrition

Infant Nutrition. By P. C. Jeans, A. B., M. D., professor of Pediatrics, College of Medicine, State University of Iowa, Iowa City; Williams McKim, B. S., M. D.; late professor of Pediatrics, Washington University School of Medicine; physician in chief, St. Louis Children's Hospital, St. Louis. Fourth edition, revised. Illustrated. St. Louis, Mo.: The C. V. Mosby Co., 1947. Pp. 516. Price around $7.50.

There is perhaps no field in medical practice in which more difference of opinion has existed than in that of infant feeding. So numerous have been the theories advanced and so diverse the methods of feeding recommended that the practitioner is likely to become hopelessly bewildered. Much of this confusion, however, is avoidable, for the fundamental facts concerning the nutritional requirements of infants are now fairly well established, and the most that any type of feeding can accomplish is to fulfill these needs. This book summarizes present-day knowledge concerning the nutritional requirements of infants under normal and pathological conditions and indicates the effects of failure to meet any or all of these requirements.

In order that the results of feeding on the growth and development of infants may properly be appraised, essentials of normal growth and development are included. A food, although a complete one, cannot be expected to meet the nutritional requirements unless it is one which is capable of utilization by the infant. It must be digestible and absorbable and not capable of causing injury to the body. The selection of such a food must be based on an understanding of the characteristics of the chief food elements and the processes of digestion and absorption in infancy as well as alterations of these processes which are likely to occur under abnormal conditions. The chapters on *metabolism* and *digestion* outline the present-day viewpoint on these subjects.

With a thorough knowledge of the nutritional needs of the infant and of the means by which it is possible to meet those needs, the practitioner is in a position to appraise the value of any given type of feeding. If a formula or type of food is one which meets fully the requirements and at the same time is one which is capable of utilization without harm to the body, it will be successful. If it fails to meet any one of the essential requirements, it will fail as a whole. If these self-evident facts were more fully appreciated, there would be fewer failure due to the feeding of well-balanced digestible formulas in sufficient amounts to meet the minimal energy requirements or the feeding of mixtures meeting the caloric demands but deficient in such essential elements as protein or some of the vitamins.

There are numerous ways in which infants may be fed successfully and there is no one method of feeding or type of food which is to be recommended to the exclusion of others. On the other hand, there is no reason to resort to the use of complicated formulas or expensive proprietary preparations when the particular requirements in the individual case may be fully met by simpler means. The simpler means are especially stressed in this book, as any complication of methods is not only unnecessary but introduces greater chances for error.

The chief gastro-intestinal disturbances of infants —vomiting, diarrhea and constipation—receive especially full consideration, for the occurrence of these conditions may wreck any carefully laid plan of feeding.

So important is the relationship of infection to nutrition that a separate chapter is devoted to the subject. Recently recognized is the fact that many of the disturbances of infants which have previously been attributed to dietary faults are in reality the result of infections. The relationship however is a reciprocal one, for infections often occur because the nutrition has been inadequate. An infant suffering from an unrecognized otitis media cannot be made to thrive by merely changing the feeding formula, nor on the other hand can an infant with a chronic infection be expected to overcome the infection unless the diet is an adequate one.

A thorough exposition of the fundamental principles of nutrition are of greater value to the practitioner than a mere outline of methods of procedure, for with a conception of the underlying principles, he can intelligently meet any condition as it arises and be independent of "rule-of-the-thumb" procedures. Nevertheless, the practical application of the scientific principles laid down can perhaps best be appreciated by the use of specific examples. For that reason numerous clinical protocols have been introduced illustrating the more common nutritional problems: details of the management of cases described are given. An attempt has thus been made to give the how as well as the why. The book is invaluable in the management of nutritional problems of infants, well and sick.

* * *

Baelz (1845-1913), a German but with a wide experience in the Orient, is accredited with Cheilitis glandularis, or *Baelz's disease.*

SURGICAL DIGEST

By RICHARD A. LEONARDO, M. D.
Rochester, N. Y.

Heterotopic Pancreatic Tissue Barbosa *et al.*, remind us that one in every five hundred cases subjected to upper abdominal surgery also has heterotopic pancreatic tissue, usually situated in the submucosa of the stomach, duodenum or jejunum, and especially in males. These abnormally placed bits of pancreatic tissue may undergo pathological changes and cause symptoms suggesting peptic ulcer, gall bladder or biliary tract disease, or appendicitis. When encountered, and if considered the probable cause of the patient's symptoms, such aberrant pancreatic tissue should be excised.

Vaginal Smears According to Ulfelder and Meigs, cytologic studies of vaginal smears enables the experienced observer to detect estrogenic effect, occasionally corpus-luteum function, and surely it is helpful in the diagnosis and prognosis of genital cancer. By such repeated studies, one is able to determine by the appearance of the normal vaginal cells as well as the malignant ones, whether the radiotherapy or the roentgen therapy, or both, are producing satisfactory results that would justify one in anticipating a "cure" of the malignancy. If the normal cells do not show the expected effects of radiation then one can prognosticate that surgery or other forms of treatment will be indicated

Malignancy of the Islands of Langerhans In all, 24 cases of carcinoma of the islands of Langerhans have been reported in literature. In many of them, hypoglycemia, often of a severe degree, is present. Sanchez-Ubeda and Carr recently reported such a case in which autopsy also revealed metastases to the liver. The condition is one to be kept in mind when an unexplained hypoglycemic condition is found .

Lung Abscess According to W. Sweenty, a lung abscess is often mistaken for advanced pulmonary tuberculosis. One quarter of all these cases heal spontaneously or under medical regimen, with postural drainage, oxygen inhalations, penicillin injections, etc. Almost half of the remaining cases need surgical therapy, such as a two-stage pneumonostomy. Penicillin and tyrothricin may be instilled directly into the abscess cavity, with favorable results. Some cases do well on pneumothorax plus bronchial drainage, with or without additional crushing of the phrenic nerve. Lobectomy or pneumonectomy is reserved for the most advanced cases.

Caronamide and Penicillin According to Crosson et al, the simultaneous administration of this drug greatly increases the blood concentration of penicillin whether given orally or by injection. The drug is given orally and it "produces a physiologic and reversible inhibition of the excretion of this antibiotic." This results in a marked elevation of the penicillin blood level. It proves to be an economic measure and one giving great promise in the future of increasing the efficacy of each dosage of penicillin administered.

Granulomas Due to Suture Material T. G. Orr reports five instances of granulomas caused by the use of surgical silk or cotton in clean wounds. The condition, therefore, occurs, but must be very rare.

Sarcoma of the Uterus Only four percent of the cases of uterine malignancy are due to sarcoma, hence this diagnosis is seldom made correctly before operation. It may occur, especially, in conjunction with a myomatous uterus. Some authorities suggest that all myomas be sectioned at time of operative removal and if suspicious of sarcoma, a frozen section be done. Sarcomatous uteri must be removed *in toto, together with both tubes and ovaries*. Cases of sarcoma arising in "degenerated" uterine myomata have a better prognosis after such surgery than the cases that start off as sarcoma from the beginning.

Early Cancer of the Cervix Uteri Often one or more years before clinical signs of cervical malignancy appears, a "preinvasive" carcinoma is present. It can be diagnosed by a skillful cellular study of the vaginal smear, according to Joe E. Meigs and others.

Malignant Testes In the Lahey Clinic, statistics indicate that malignancy occurs about twenty times more often in an abnormally placed (undescended) testicle than in a normally located one. They found this incidence to be over ten percent in ectopic testes. If the undescended testicle cannot be restored to its normal position by surgery (which should be done during end of adolescence, at the time that one can be sure conservative measures no longer prove effective), then it should be removed. It should *not* be placed into the abdominal cavity because it is potentially malignant. When a testicle begins to assume malignant characteristics, one of the first clinical signs is a painless swelling in the scrotum. A positive Aschheim-Zondek or Friedman Test is also important in the diagnosis, but a negative reaction does *not* rule out malignancy.

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DECEMBER, 1947

Medicolegal Notes

Waiver of Representation in Application for Life Policy as to Health of Applicant's Relatives

A representation, not a warranty, in the application for a life policy that none of the applicant's relatives had ever suffered from tuberculosis was false and material to the risk, making the policy voidable, if there was no waiver of this condition in the policy by the insurance company. Insured's brother had died of tuberculosis a little more than six months prior to the application at the same institution in which insured died.

The only waiver on which plaintiff beneficiary relied was the acceptance of premiums after knowledge of the death of insured's brother and after insured was confined to the same hospital with the same disease.

From a judgment for plaintiff in Common Pleas the insurance company appealed. The South Carolina Supreme Court, Kilpatrick vs. Brotherhood of Railroad Trainmen Insurance Department, 42 S. E. 2d 891, affirming the judgment, held that the evidence made the question of waiver of the defendant's right to rescind the policy for false representations in the application a question for the jury. Whether the insured was in good health, as required by the policy, at the time the policy was issued and delivered, was also held a question for the jury. A physician's testimony that tuberculosis is contracted by long contact and not by casual contact, made his opinion that insured was suffering from tuberculosis at the time of issue of the policy inadmissible, in view of the fact that there was no testimony that insured had any contact with persons who had tuberculosis.

Summing up, the appellate court said that, except for the issue of waiver raised by the testimony, it would have been the duty of the trial judge to grant the defendant's motion for a direction of verdict in its behalf. And although the writer of the opinion, and presumably the other members of the appellate court, definitely disagreed with the conclusion reached by the jury, the court was powerless under the law to grant the defendant relief.

Causal Connection Between Accidents to Eye and Disability Sustained

A drill press operator struck his head against a bolt of the drill press, cutting the upper eyelid of the right eye, causing severe pain and drawing blood. A moment later, while sitting down and cleaning the jig of the drill press with an air gun, copper chips were blown into the same eye. For about ten months he retained use of the right eye, and though vision was blurred, no working time was lost. Then a fellow employee, in opening a door, caused it to hit the employee's eyeglasses breaking the right lens and cutting the upper eyelid. After treatment for months it became medically determined that the eye was permanently blind. In a proceeding under the New Jersey Workmen's Compensation Act, two expert medical witnesses testified they had examined him, and on hypothetical question it was their opinion that the two accidents were the cause of loss of vision of the eye. The third expert produced by the employee testified that apart from the loss of vision there was a further posttraumatic neurological disability of seven and a half percent. The employer alleged neither accident was the cause of the disability.

Three expert medical witnesses testified for the employer. Two of them stated they had examined the employee and in their opinion the eye disability was the result of disease, a systemic condition from within, and that neither accident had any influence on the eye. The third expert admitted the complaints of headache, nervousness, less sociability, bumping into people, were all logical and credible and resulted from the disability. The employer also introduced into evidence the records of the hospital where the employee was treated.

The lay evidence as to the occurence of the

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two accidents, chiefly the testimony of the employee's physician, was held uncertain and vague. As to the employer's medical testimony that the employee's blindness was the result of a systemic condition, the experts were unable to point to any disease or constitutional disorder which would account for the disability. Both experts emphasized that the systemic condition occurring over a period of many years resulted in adhesions in the eye, and therefore the pupils could not be dilated. Yet, the hospital report indicated that during the period of treatment between the first and second accidents the employee's pupils were dilated very widely during treatment, indicating that the infection was not of long standing. Furthermore, one of the employer's experts in a medical report to the insurance company stated there was a remote probability of the eye having been infected from a blow, and did not refer to any systemic condition as the basis for the disability. On the stand he contradicted another medical expert of the employer by saying the disability could have been caused by a blow.

The employer relied heavily on the report of the hospital where the employee was administered treatment, pointing to the fact that it contained no reference to a history of accidents as causing the disability. "However," the court said, "the report contains no history of any kind; hence it can be of no probative value in that respect."

"To justify a finding for the respondent (the employee) the evidence must preponderate in his favor, and where the evidence justifies a finding in behalf of an employee and the employer seeks to attribute the disability to a cause for which he is not responsible, the burden of proof is on the employer to show such cause.

"The evidence submitted by the respondent being highly persuasive and logical while that of the prosecutor (the employer) uncertain, inconsistent and self-contradictory, the respondent is entitled to judgment."

The judgment of the Hudson County Court of Common Pleas reversing a decision of the New Jersey Workmen's Compensation Bureau denying compensation was therefore affirmed. Seriquese vs. Air Reduction Sales Co., New Jersey Supreme Court, 51 A 2d 543.

* * *

Lichen nitidus is known as *Pinkus' disease,* after Felix Pinkus, who gave the original contribution on the disease. Pinkus has written numerous articles on dermatologic subjects and syphilis.

* * *

Paxton's disease, or leptothrix, was described in 1869; the disease was named by Erasmus Wilson.

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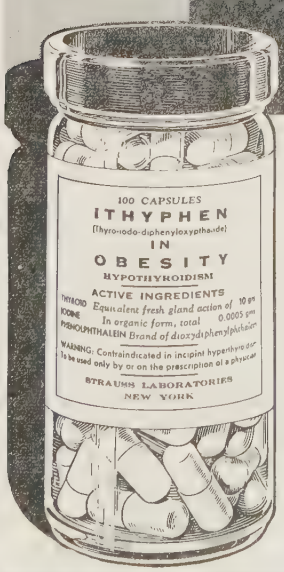

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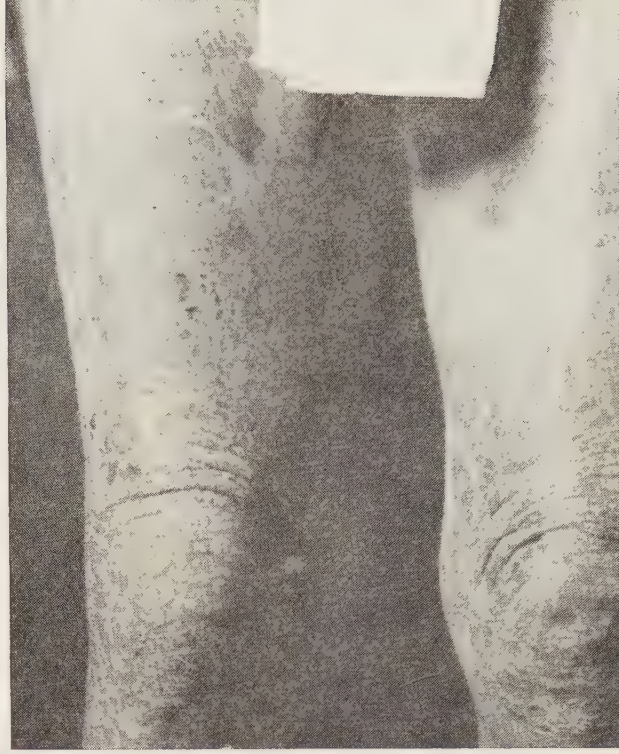

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AMA Recipient of Scientific Award

This year the American Medical Association is the recipient of the Scientific Award of the American Pharmaceutical Manufacturers' Association. The award is contributed on behalf of the association's "fundamental contributions to public health in the field of medical research."

The presentation took place December 16, at the Waldorf-Astoria hotel, N. Y., when the pharmaceutical manufacturers convened for their midyear meeting. It climaxed a day-long program of scientific papers in which nationally-famous medical authorities recorded the progress made through research in their particular fields.

This annual award, established in 1939, stresses the value of the long years of patient laboratory work by trained researchers which keep the wheels of medical progress going forward.

Last year the award went to the Mayo Foundation for Medical Education and Research for research contributions of profound and lasting benefit to mankind.

New VD Film Put Out by Army

"The Miracle of Living," a new four reel 39 minute motion picture, has been produced under the auspices of the Surgeon General for showing to troops and to the public. It reportedly represents a carefully planned and professionally handled film. The producer, Giles O'Connor, was also responsible for the Army Day picture, "Your Army Today."

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Industry Discovers the Worker

According to Frank W. Abrams, chairman of the board, Standard Oil Company, N. J., the machine age has overshadowed the value of the worker, his problems and opportunities.

However, Abrams emphasized that during the past 10 or 15 years, the industrial manager has been reminding himself that the most important element in any enterprise is people and that the most amazing instrument yet devised is man himself.

A necessity to avoid absenteeism in industry is to provide employes with first aid facilities, sanitary working conditions, correct lighting, proper ventilation and safety programs. He said, "It is the job of good industrial management not only to maintain a healthy individual—to prevent illness—but also to help the men and women of an organization to improve their physical condition."

Mr. Abrams expressed his views at the recent meeting of the New York University Bellevue Medical Center Fund, held at the Waldorf-Astoria hotel, N. Y.

Flu Vaccine Goes to Army Personnel

Flu vaccine has been innoculated in all Army personnel this fall to ward off any possible influenza epidemics. Precautions have been taken so that those persons having a history of egg allergy will not have to take the shots. Any suspected outbreaks of the disease

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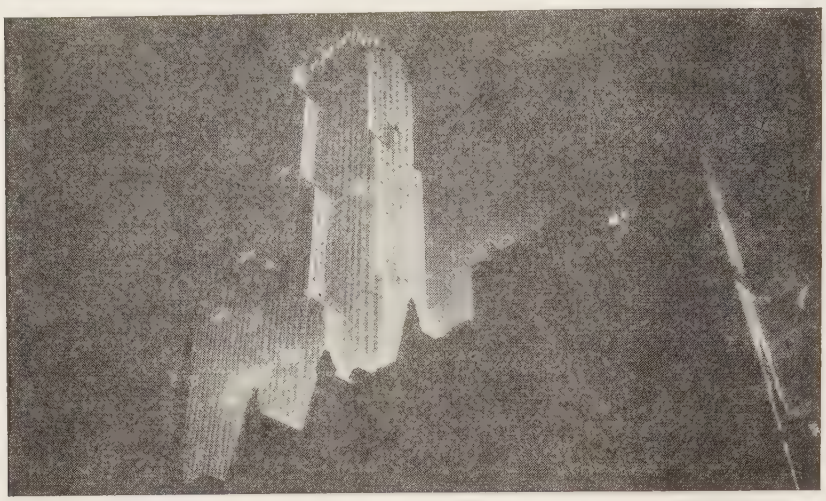

IMPRESSIVE In a high percentage of cases, the results obtained with Mandelamine in the treatment of common urinary infections are no less than impressive. Carroll and Allen,* in their recent, carefully controlled study of 200 unselected cases of common urinary infections, found that approximately 74 per cent of all patients responded to Mandelamine therapy with urines that became microscopically and culturally negative in an average of six days. In certain cases, notably pyelitis, the urine was sterilized in three days, whereas infections associated with deep-seated or obstructive lesions required up to two weeks of Mandelamine therapy. Mandelamine was found to be virtually nontoxic in therapeutic dosage, and an acid urine was maintained without dietary restrictions or other drug therapy, excepting in those cases where urea-splitting organisms were present.

This authoritative clinical study confirms the many earlier reports establishing Mandelamine as an efficient antibacterial agent of low toxicity and broad therapeutic activity in urinary tract infections. A physician's sample and literature on request.

*Carroll, G., and Allen, H. N., The Treatment of Urinary Infections with Mandelamine (Methenamine Mandelate): A Clinical Study of 200 cases, J. Urol., 55: 674-681, June 1946.

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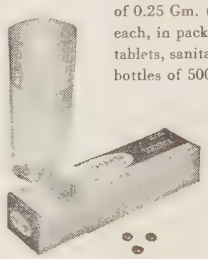

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occurring in a military installation or command will be immediately reported to the Surgeon General. Laboratory tests will be made in the field on early representative cases to establish outbreaks. In addition to the A and B viruses being administered the vaccine contains an A-variant cultured from the distinctive type of influenza that occurred at Fort Monmouth, N. J. last season. The Army is constantly on the lookout for any new demonstrative strains.

Baruch Speaks at Associated Hospital Service Meeting

Bernard M. Baruch advocated compulsory health insurance for low income groups at the recent dinner given at the Hotel Biltmore, N. Y., celebrating the progress of the Associated Hospital Service—New York's Blue Cross Plan.

Mr. Baruch noted that in 1939 the Bureau of Medical Economics of the American Medical Association has estimated that families with an income of $3,000 or less, two thirds of the population, could not "afford the cost of serious illness."

He went on record as expressing his own preference for Government meeting only part of the cost of such a program, with part coming in payroll deductions from employers and workers.

Sponsors of the affair were the Medical Society of N. Y. State, the Coordinating Council of the Five County Medical Societies of Greater N. Y., and the Greater N. Y. Hospital Associations.

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Cancer Diagnostic Service

According to *Health News* diagnostic laboratories approved by the New York State Commssioner of Health have been establshed in most dstricts, and with very few exceptions provision has been made in these laboratories for the examination of tissue specimens for evidence of cancer.

Because of the service necessary operations or other treatment for cancer need not be delayed awaiting the report of the examination of a specimen of tissue sent by mail to a laboratory at a distance. The need for reliable, local laboratory service is becoming so generally appreciated that the demand for qualified personnel has exceeded the supply. The increasing number of physicians who are specializing in pathology, however, and the return of officers who were in charge of laboratories maintained by the Army and Navy during the war are expected in the near future to meet the needs of most of the newly established laboratories. In the interim, physicians practicing in districts having no approved local laboratories may send specimens of tissue to the Division of Laboratories and Research in Albany. This service is no longer provided by the Roswell Park Memorial Institute in Buffalo.

Specimens of tissue to be examined for evidence of cancer should be submitted in suitable fixative, such as 10 percent formalin (readily available at drug stores), in order to preserve and fix the tissue during transit.

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Added to a cup of boiling water, each dose of DEBAMIN produces a delicious broth of approximately neutral pH. With DEBAMIN you will find patient resistance to protein supplementation reduced to a minimum.

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Dr. Edward L. Bortz, president of the American Medical Association, said in a current radio address that a child born today can expect to live to be a hundred if he's given proper care in infancy and youth, and if he avails himself of present medical knowledge through his adult years.

The doctor cited the following medical advances which have kept a large percentage of persons over sixty five active and productive; developments in anticoagulent therapy, proper nutrition, new surgery techniques for protection against pneumonia, and present research in the fields of metabolism, cancer, chronic rheumatic diseases.

It was also brought out in the doctor's speech that science has learned much about the psychologic problems of old age.

"We know for example that lively interests stave off senility; and that an old dog can learn new tricks, as well as improve upon those he already knows.

"Stradivarius fashioned his finest violins after he was ninety;" Dr. Bortz continued, "Titian painted one of his greatest masterpieces at the age of ninety-eight; Sarah Bernhardt gave one of her greatest performances at the age of seventy-eight."

Thus the doctor proved his point that while it is true that few of us are all-time geniuses, we too can continue to stay youthful in mind through continued growth in our hobbies.

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NEW PRODUCTS

Rayopake—New Viscous Contrast Medium

A new, water-soluble contrast medium for x-ray studies of the uterus, fallopian tubes, bladder and urethra was announced by Hoffmann-La Roche Inc., Nutley, N. J. Rayopake is rapidly absorbed from serous or mucous surfaces; it therefore obviates the danger of foreign body reaction from "pelvic spill" with no likelihood of tubal occlusion due to lodgment of residual matter. Since Rayopake is readily miscible with urine, aspiration following use in the bladder or urethra is unnecessary.

The high viscosity of Rayopake is of particular advantage in outlining the lumen of the uterus, tubes, bladder and urethra but it prevents its use in other body cavities. It gives radiographic shadows and is distinguished by convenient administration and low toxicity.

Rayopake is available in 7.5-cc vials for hysterosalpingography and 35-cc vials for cystourethrography. This product is a viscous, aqueous solution, containing 50 percent diethanolamine salt of 2,4-dioxo-3-iodo-6 methyl tetrahydropyridine-N-acetic acid and 4.8 percent polyvinyl alcohol, with 0.01 percent benzalkonium chloride as preservative.

Non-Narcotic Cough Syrup Hits the Market

A new, *non-narcotic* cough syrup recommended for severe cough—particularly for night cough—was recently announced by Hoffmann-La Roche, Inc., of Nutley, N. J. Syrup Sedulon contains a new drug developed in the Roche research laboratories—Sedulon— which has a mild sedative action. It can often be used in place of codeine, thus avoiding the use of a narcotic. Its pleasant flavor makes Syrup Sedulon "easy swallowing" by young and old patients alike. It is available for prescription in 4-oz and 1-pt bottles.

Perabeta Released by Sharp & Dohme

Perabeta, plus vitamin C, B-complex and Ascorbic Acid Capsules, was nationally released by Sharp & Dohme, Incorporated, Philadelphia.

It is reported that these capsules are particularly effective for the prophylaxis and treatment of frank and subclinical deficiencies of vitamins B and C. These include beriberi, pellagra, and ascorbic acid deficiency states. Perabeta capsules are also effective in supportive treatment during pregnancy and lactation, surgery, febrile states and diarrhea and diuresis.

Each capsule contains Thiamine hydrochloride (vitamin B_1), 3 mg; Riboflavin (vitamin B_2), 3 mg; Pyridoxine hydrochloride (vitamin B_6), 0.1 mg; Niacinamide, 20 mg; Calcium pantothenate, 3 mg; other natural factors of the B-complex from 84 mg. of dried liver, including traces of biotin, folic acid and inositol; Ascorbic acid (vitamin C), 50 mg.

Suggested dose of 'Perabeta' capsules for adults and children (6 to 12 years of age) is one capsule per day. The therapeutic dose is evolved in multiples of the prophylactic dose in accordance with individual requirements as determined by the physician. They are supplied in bottles of 100 and 500.

Lynoral Elixir Introduced by Roche

Lynoral Elixir, new potent oral estrogen has been introduced by Roche-Organon Inc., Nutley, N. J. Each teaspoonful contains 0.03 mg. of ethinyl estradiol, and its use permits convenient adjustment of dosage to the requirements of the individual patient. It is also reported that it may be prescribed in combination with sedatives, analgesics, and other therapeutic agents.

In most menopausal cases, treatment is begun with 1 teaspoonful of Lynoral Elixir twice a day; in severe cases, should this dosage be insufficient, it may be increased under the physician's supervision to 3 to 5 teaspoonfuls a day. For maintenance therapy, 1 teaspoonful a day usually suffices. This product may also be administered in hypo-ovarianism, infantilism, menstrual disturbances amenable to estrogen therapy, and the symptomatic treatment of prostatic cancer.

Lynoral Elixir is available for the physician's prescription in bottles of 4 ounces and 1 pint.

Two New "Cremo" Products Developed

A new dosage form for sulfamerazine and sulfadiazine, Cremomerazine and Cremodiazine, are the two new additional "Cremo" products of the Sharp and Dohme family, which are used in the treatment of specific and non-specific diarrheas.

Cremomerazine is characterized by rapid absorption. It is more completely absorbed from the gastrointestinal tract than other sulfonamides and results in higher blood levels. Because the drug is more slowly eliminated by the kidneys, smaller or less frequent doses produce and maintain therapeutic concentrations in the blood and tissues.

Both Cremomerazine and Cremodiazine are indicated in the treatment of pneumonia, meningitis and other diseases susceptible to treatment by sulfonamides. They also have a wide variety of uses in pediatrics including treatment of osteomyelitis, pneumonia, bronchitis, tonsillitis, impetigo.

Cremomerazine and Cremodiazine are supplied in 16 fluid ounce "Spasaver" bottles.

Wife Edits Dr. Crile's Autobiography

Through Grace Crile's intensive collection and selection of her husband's voluminous autobiographical writings, explanatory connective material has been included in the contents of "George Crile: An Autobiography," edited, with sidelights by Grace Crile, and published by J. B. Lippincott Company, Philadelphia.

This two volume illustrated autobiography spans Crile's life through a period of sensational change in the science and practice of medicine. Among this doctor's outstanding achievements was the first successful amputation under local anesthesia, and the first successful blood transfusion in 1906. A motivating force in founding the American College of Surgeons, Dr. Crile, at the end of World War I, was the director of medical research for the American Army.

Lowila for Sensitive Skin

It is reported by the *Journal of Investigative Dermatology* 9:5, 1947, that Lowila Cake and Liquid, product of Westwood Pharmacal, Buffalo, quickly clears up eczematous dermatitis, neuroermatitis, fungous, and seborrheic dermatitis. Observations substantiate other investigations by dermatologists that this soapless cleansing cake produces only a very moderate and transient rise in skin pH as compared to the marked increase following the use of soaps.

Iron and Folic Acid Capsules Added to National Drug Line

The National Drug Company, Philadelphia, announce the addition of Iron and Folic acid capsules to their line of pharmaceutical products.

Each elastic capsule contains: ferrous sulfate, exsiccated, 0.2 Gm; folic acid, 1.7 mg.

This preparation is indicated in common iron deficiency anemias including nutritional hypochromic anemia, idiopathic anemia, hypochromic anemia of pregnancy, infectious states, infancy and childhood. Common macrocytic anemias of sprue, macrocytic gestational anemia, gastrointestinal macrocytic anemia and macrocytic anemias of childhood.

Folic acid has been shown to be specific for red blood cell maturation. Evidence has been presented of the favorable effects of folic acid upon blood cell equilibrium, appetite, weight and activity. It is also evident that folic acid is one of the essential factors for maintenance of normal cellular integrity in the bone marrow, and that it supports panhematopoiesis more satisfactorily than any other compound yet known.

Adult dose, 1-2 capsules three or four times daily.

Iron and Folic Acid capsules are available in bottles of 100 and 500.

* * *

Exfoliative dermatitis is known as *Ritter's disease*, after Gottfried Ritter von Rittersheim, a German pediatrician, (1820-1883).

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Female	114.7	116.4	117.7	118.7	120.4	123.6	127.1	129.8	132.5	133.7	135.4
DIASTOLIC **Male	76.4	78.1	78.8	79.5	80.4	81.4	82.3	83.3	84.3	84.5	84.0
Female	75.8	77.1	78.0	78.6	79.9	81.9	83.9	85.4	86.8	86.8	84.4

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*Blood Pressure; Report of Joint Committee on Mortality of The Association of Life Insurance Medical Directors and The Actuarial Society of America New York, 1925, pp. 10, 52.

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